

Investor: PE "Roads of Serbia"



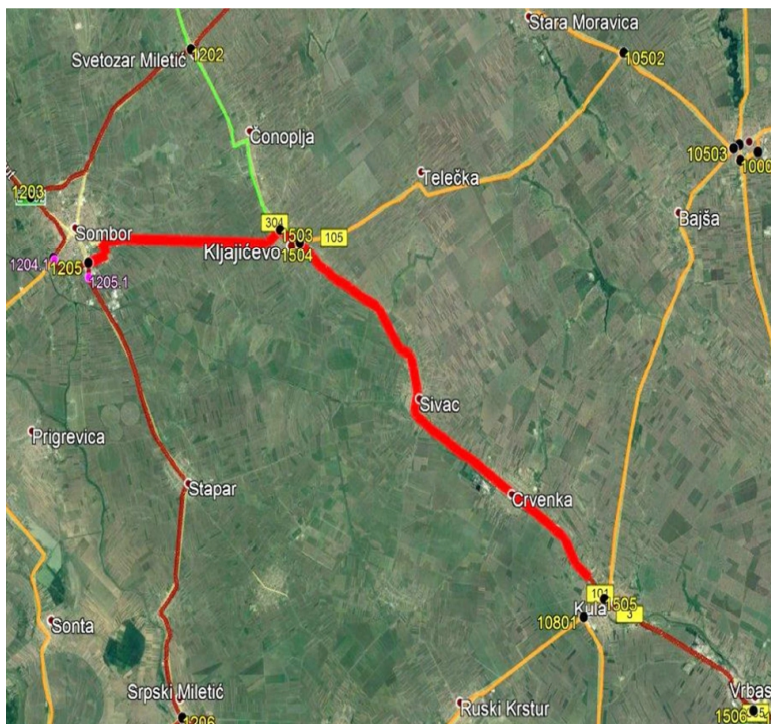
ENVIRONMENTAL MANAGEMENT PLAN

PREPARATION OF MAIN DESIGN FOR HEAVY MAINTENANCE (ROAD REHABILITATION-UPGRADING) OF THE STATE ROAD IB-15, SECTION: SOMBOR (INDUSTRIAL ZONE) – KULA

CHAINAGE: km 24+251 - km 63+696

L= 39,535 m

ENVIRONMENT CATEGORY B



June, 2021.



Document information

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ABBREVIATIONS AND ACRONYMS

CEP	Contractor's Environmental Plan
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
IFIs	International Financing Institutions
INCV	Institute for Nature Conservation of Vojvodina Province
PIPCM	Provincial Institute for the Protection of Cultural Monuments
MoEP	Ministry of Environmental Protection
MoCTI	Ministry of Construction, Transport and Infrastructure
PSC	Project Supervision Consultant
RE	Resident Engineer
SLMP	Safety Labour Management Plan
WMP	Waste Management Plan

INTRODUCTION

Road Rehabilitation and Safety Project (RRSP) is a project of support of international financing institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to the Government of the Republic of Serbia in implementation of the National State Road Network Rehabilitation Program. This Project represents the implementation of the first phase of the Government's Program for the period 2014-2022 and covers the following:

- improvement of condition on state road network by means of rehabilitation of the existing roads,
- increase of road safety condition through appliance of measures for improvement of road safety in all phases of the Project implementation, and
- strengthening capacity and development of institutional coordination in the field of road and traffic safety through implementation of a number of various services.

The objective of this project is to produce design documentation for construction works for rehabilitation – heavy maintenance of the state road IB-15 (old road mark M-3), section Sombor (Industrial zone) - Kula, chainage: km 24+251 - km 63+696, length: 39,535 km, in line with regulative in the field of public roads, namely Article 116. of the Law on roads (Official Gazette RS, no. 41/2018 and 95/2018).

The purpose of the EMP is to present the negative environmental impacts and management problems during the construction works and the necessary mitigation measures the Contractor must apply to. Key components of the Environmental Management Plan are: Environmental Mitigation Plan and Environmental Monitoring Plan.

International financing institutions (IFI) have classified the project as environment category B, which requires an Environmental Management Plan to be carried out. Project Proponent is the Government of the Republic of Serbia, represented by the relevant Ministry, and the project is realised by PE "Roads of Serbia".

The design will be made in accordance with Serbian legislation and the conventions and safeguard guidelines issued by IFIs. The Environmental Management Plan was carried out using theoretical studies, on-site investigation, and consultation with representatives of local and regional authorities.

This EMP fulfills all the requirements defined by the Environmental Management Framework Document - EFD), with a special consideration for environment protection measures and defined monitoring program.

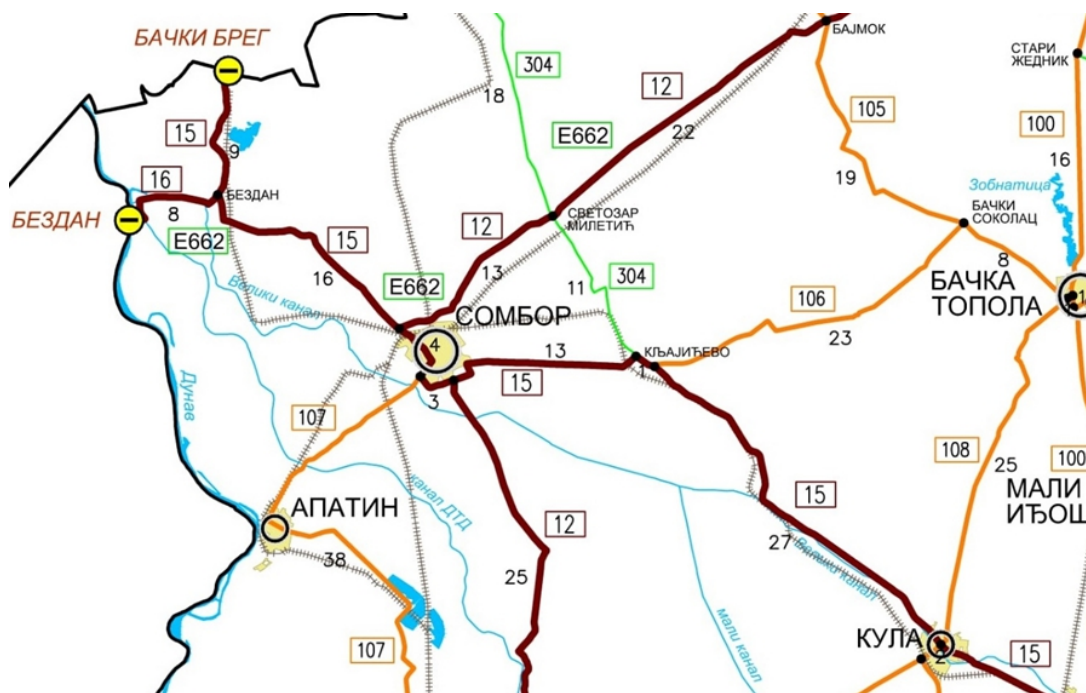
SUMMARY

Project description

The subject section belongs to the West Backa Administrative district, Municipalities of Sombor and Kula. The section in length of 22.135 km. belongs to the State Road of IB category no. 15 (old road mark R-101) ("Official Gazette of RS", No. 93/2015), and represents part of the cross traffic link through the northwestern part of the R. of Serbia. The subject section is a part of the RRSP planned for heavy maintenance during the fourth year of the Project implementation.

In accordance with the Reference System of State Road Network from 2009, the section Sombor 5 (Kljajicevo) – Kula 2 (Crvenka) is in length of 40.744 km. Upon acceptance and enforcement of the State Road Classification from 2015, new reference system was established and some names of nodes from the old reference system are changed. In addition, changes are made in length of the sections, as follows:

- the name of node Sombor 5 (Kljajicevo) is changed in Sombor (ind.zone)
- node Sombor 7 is cancelled
- the name of node Kljajicevo 1 (Conoplja) is changed in Kljajicevo (Svetozar Miletic)
- the name of node Kljajicevo 2 (Telecka) is changed in Kljajicevo (Backi Sokoloac)
- the name of node Kula 2 (Crvenka) is changed in Kula (Backa Topola)
- the total length of the subject section is 40.891 km.



Picture 1. Extract from the state roads reference system map, November 2017

The total length of the road section that is subject of this technical documentation is 39.535 km. The beginning of the section is in node 1205. The Design shall include the entire intersection in the beginning node. The end of the section is defined on 1356 m. before the node 1505 (at app. chainage km 63+696) i.e after the signboard for settlement. The end of the sections shall be complied with the section in continuation Kula-Vrbas, which in under the second year of the RRSP Programme.

Length of the sub sections foreseen for designing:

Sombor (Industrial zone) - Kljajicevo (Svetozar Miletic) L=12.9 km

Kljajicevo (Svetozar Miletic) - Kljajicevo (Backi Sokolac) L=1.4 km

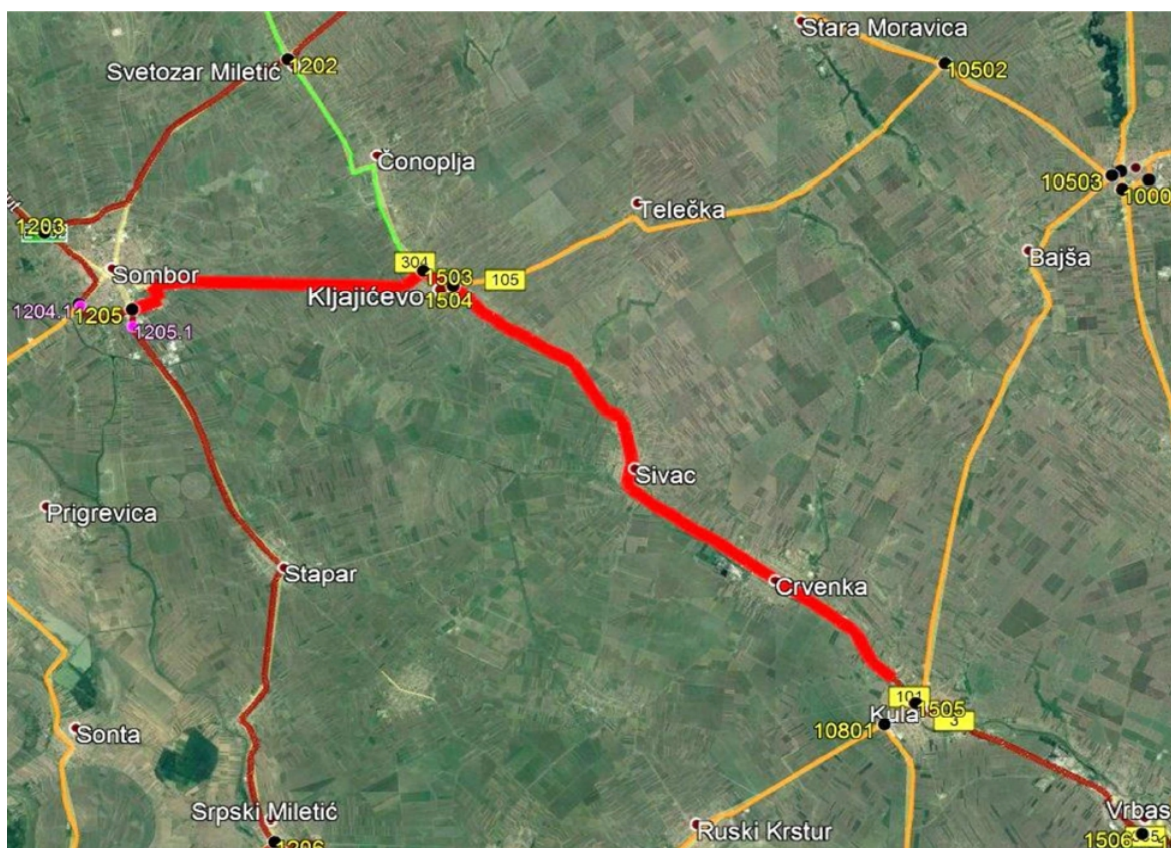
Kljajicevo (Backi Sokolac) - Kula (Backa Topola) L 26.6 km

Table 1.: Traffic sections and nodes according the reference system

No	Old section mark*	Section mark	Beginning node mark	Marking of the ending node	Name of the beginning node	Name of the ending node	Length of the section (km)
1	0779 and 0780	01503	1205	1503	Sombor (ind.zone)	Kljajicevo (Svetozar Miletic)	12.867
2	0781	01504	1503	1504	Kljajicevo (Svetozar Miletic)	Kljajicevo (Backi Sokolac)	1.373
3	0782	01505	1504	1505	Kljajicevo (Backi Sokolac)	Kula (Backa Topola)	26.561 (**25 205)
Total:							40 891 (**39 535)

* Mark of the section according to the old referent system 2008/2009 (JV CPL- Nievelt)

** Length of the sub sections foreseen for designing



Picture 2. Macrolocation of the section



Picture 3. Start of the section Sombor-Kula in node 1205 Sombor (Ind.zone)

The total length of the road section that is subject of this technical documentation is 39.535 km. The beginning of the section is in node 1205. The Design shall include the entire intersection in the beginning node. The end of the section is defined on 1356 m. before the node 1505 (at app. chainage km 63+696) i.e after the signboard for settlement.



Picture 4. End of the section Sombor-Kula in node 1505

Policy, legal and administrative framework

The Ministry of Environmental Protection (MoEP) is the key institution in the Republic of Serbia, responsible for producing and implementing the environmental policy.

Legislation in the field of environmental protection that is currently in force in the Republic of Serbia is summarized in the Appendix 3.

In the Republic of Serbia the procedure for Environmental Impact Assessment (EIA) is governed by the Law on Environmental Impact Assessment, which is fully in accordance with the European Directive 85/337/EEC. PE "Roads of Serbia" submitted a request to the MoEP for the opinion on the need of starting EIA procedure for construction works for rehabilitation – heavy maintenance of the state road IB-15 (old road mark M-3), section Sombor (Industrial zone) - Kula. Received opinion states that project of road maintenance and road rehabilitation does not represent a subject of EIA, and that it is not listed in the Regulation on establishing the list of projects requiring a mandatory impact assessment and list of projects that may require an EIA, thus there is no obligation for submitting Request on the need for an environmental impact assessment.

PE "Roads of Serbia" submitted a request to the Institute for Nature Conservation of Vojvodina Province (INCV) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PE "Roads of Serbia", the INCV issued a statement on conditions for nature protection 03 no. 019-107/2 dated 19.02.2021. which states that the subject road section is not inside a protected natural area.

The subject route intended for heavy maintenance goes over agricultural area, intersecting with meliorative canals which represent wildlife corridors between registered habitats of strictly protected and protected wild species. The route intersects local ecological corridors determined by Spatial Plan of the city of Sombor ("Official Gazette of City of Sombor", no. 05/2014) and eastern part of the route goes along the canal Vrbas-Bezdan which is regional ecological corridor, determined by Regional spatial plan of AP Vojvodina ("Official Gazette of APV", no. 22/11). Accordingly the INCV issued official nature protection conditions, presented in Appendix 5.

PE "Roads of Serbia" submitted a request to the Provincial Institute for the Protection of Cultural Monuments (PIPCM) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PE "Roads of Serbia", PIPCM issued a statement on conditions for protection of cultural monuments no. 02-253/2-2020 dated 06.12.2020. which states that there are 17 archaeological sites from prehistoric, antic and medieval periods on the subject section.

Upon receiving mentioned documentation (the conditions of the INCV and PIPCM), as well as based on the conditions set in the Environmental Management Plan, PE "Roads of Serbia" will ensure full implementation of environmental protection measures defined by the design and thus reduce the impact on local population and natural environment.

Lender requirements that are applied to this project of road rehabilitation include the following Policies:

- World Bank's Operational Policy for Environmental Impact Assessment (OP 4.01);
- Environmental and Social Policy, EBRD;
- European Investment Bank (EIB): Statement of Environmental and Social Principles and Standards (2008).

The World Bank and EIB require that the design complies with the Republic of Serbia national laws, EU standards and IFI's guidelines as noted above.

Baseline conditions assessed during route survey

The subject road section intended for rehabilitation is the part of the road that connects Sombor and Kula. The road section passes through Kljajicevo, Sivac and Crvenka.

The section crosses canals of detail canal network of hidrosystem Danube-Tisa-Danube (HsDTD) at several locations, while on the part of the route between Crvenka and Kula it goes along the canal Vrbas-Bezdan, which is a part of the main canal network of the HsDTD, at minimum distance of around 50 m. At these locations there are box and pipe culverts.

Based on the assessment of the existing state of the road drainage system, which is done by detailed visual inspection on the whole section it is concluded that the drainage system is in solid condition. At certain parts of the section heavy maintenance is necessary.

Rehabilitation of existing and eventual construction of new objects of drainage system represents one of the most important measures, which would significantly improve drainage and consequently extend exploitation period of the road.

There are no significant noise sources, as well as air polluters.

There are no existing landfills or dumpsites in immediate vicinity of the road. Moreover, issued conditions from public institutions state that this road section is not inside a protected natural area, but there are 17 registered archaeological sites on the route.

Summary of Environmental Impacts

Due to the rehabilitation works involved, temporary negative impacts may occur at the location of the subject works, and may include interruption of traffic flow, decreased road safety, damages on access roads, dust and gas emissions and temporary disturbance of residents of the neighboring areas (due to air pollution and increased noise pollution). Short-term biocenosis disturbance may occur, and potential pollution of soil and water. Works in the quarry, borrow-pits and asphalt plants are performed outside the site and may cause negative impact if not managed properly.

No relocation and resettlement issues are anticipated.

Various cases of water contamination can occur during the rehabilitation of the road and future operation. Wastewater discharged during the construction works can jeopardize the quality of the surface and underground water. Adequate mitigation measures and monitoring activities are planned, in accordance with the Law on Water ("Official Gazette of RS", Nos. 30/10, 93/12 and 101/16). As for the potential pollution during operation, these are limited to accidents only, considering the very low concentration of pollutants in drainage water that may occur. In such a case, procedures for action in accidental situations, as defined by the Ministry of Interior and in the Water Law, will apply.

The road maintenance works will be performed entirely on public land, without any collision with private properties. Design does not require any land acquisition, resettlement or long-term disturbance of human activities.

If measures from the Mitigation Plan are properly applied, occurrence of cumulative effects will be prevented or reduced to minimum.

Environmental Management Plan

Possible environmental impacts will be mitigated during the design, heavy maintenance, and road operation phases (as shown in Appendix I, and within the EMP).

A basic assessment of the proposed road rehabilitation project concluded that the negative impacts will be negligible if the mitigation measures are properly implemented. The EMP consists of 3 parts:

- Mitigation Plan (Appendix I),
- Monitoring Plan (Appendix II) and
- Stakeholder Engagement and reporting from public consultations (APPENDIX IV).

Before commencing the works, the Contractor will prepare a Contractor's Environmental Plan (CEP). During the rehabilitation, the Contractor will work according to the requirements of the CEP (based on the EMP). The CEP will amplify how the Contractor will address the activities in the rehabilitation section of the EMP. The contractor will submit the CEP to the PE "Roads of Serbia" for approval. It is the Contractor's obligation to include implementation of environmental mitigation measures in his overall cost. The Contractor will be required to provide a short statement that confirms that:

- The CEP has been included into the bid price;
- The Contractor has a qualified and experienced person on the Contractor's team who will be responsible for the environmental compliance requirements of the EMP;
- The Contractor and its sub-contractors will comply with Republic of Serbia national laws, EU standards and Borrower requirements.

Stakeholder engagement - Information disclosure, consultations and public participation

The Performance Requirement 10 of the EBRD's Environmental and Social Policy identifies good international practice relating to ongoing stakeholder engagement as an on-going process which involves (i) public disclosure of appropriate information, (ii) meaningful consultation with stakeholders, and (iii) an effective procedure or mechanism by which people can make comments or raise grievances. The process of stakeholder engagement should begin at the earliest stage of project planning and continue throughout the life of the project. It is an integral part of the assessment, management and monitoring of environmental and social impacts and issues of the project.

This Performance Requirement is guided by the spirit, principles and ultimate goals on public disclosure and stakeholder engagement comprised in the United Nations Economic

Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.

Participation of stakeholders is significant in order to understand the nature and intensity of social and environmental impacts, as well as proposed measures for their mitigation. Public consultation is one of the ways to get feedback from stakeholders and enhance involvement of the local community in design implementation. The stakeholders may use a complaint mechanism that is publicly available (see Appendix 4).

Summary of public disclosure process

Public discussion and presentation of the Environmental Management Plan was held in the Big hall of the assembly of the City of Sombor on June 21st 2021.

Detailed Report on public consultation is given in Appendix 4.

1. PROJECT DESCRIPTION

The purpose of preparing this technical documentation, in line with the Law on roads is securing the following:

- eliminate existing damages,
- eliminate the causes that led to damages,
- increase of value and durability of the road,
- improvement of road safety.

The technical documentation should envisage all the necessary works in order to provide efficient and safe traffic in the project period of 10 years.

Location Description

The subject road section belongs to the state road no. 15, class IB (state border with Hungary (border crossing Backi Breg)-Bezdan-Sombor-Kula-Vrbas-Srbobran-Becej-Novi Becej-Kikinda-state border with Romania (border crossing Nakovo)). The subject section belongs to the West Backa Administrative district, Municipalities of Sombor and Kula. The subject road section intended for rehabilitation is the part of the road that connects Sombor and Kula. The road section passes through Kljajicevo, Sivac and Crvenka.

The section Sombor-Kula, subject of this project is 39,535 km long (km 24+251 - km 63+696). It consists of three sub sections: Sombor-Kljajicevo (section mark 01503), section in Kljajicevo (section mark 01504) and Kljajicevo-Kula (section mark 01505).

First subsection Sombor-Kljajicevo starts in node 1205 Sombor (Ind.zone) and ends in node 1503 Kljajicevo (Svetozar Miletic). The second subsection is located in the settlement Kljajicevo and starts in node 1503 Kljajicevo (Svetozar Miletic) and ends in node 1504 Kljajicevo (Backi Kostolac). The third subsection Kljajicevo-Kula starts in node 1504 Kljajicevo (Backi Kostolac) and ends in node 1505 Kula (Backa Topola).



Picture 5. Location of the road section

Rehabilitation works description

The main design of heavy maintenance envisages four different solutions for different parts of the section.

Solution 1

Solution 1 is envisaged for the following parts of the subject section, according to the following chainages:

- km 24+251 – km 36+250,
- km 38+500 – km 58+850,
- km 60+200 – km 63+969.

Existing road construction

Preparatory works on existing road

- Removal (scrapping) of existing asphalt layers d = 5cm
- Cleaning of asphalt layer and rehabilitation of remaining cracks with bituminous emulsion
- Installation of thermostable net

Construction of new road layers

- Construction of levelling bituminous layer BNS 32cA (BIT 50/70) d = 8 cm
- Construction of wearing layer made of RC 11c (BIT 50/70) d = 4 cm

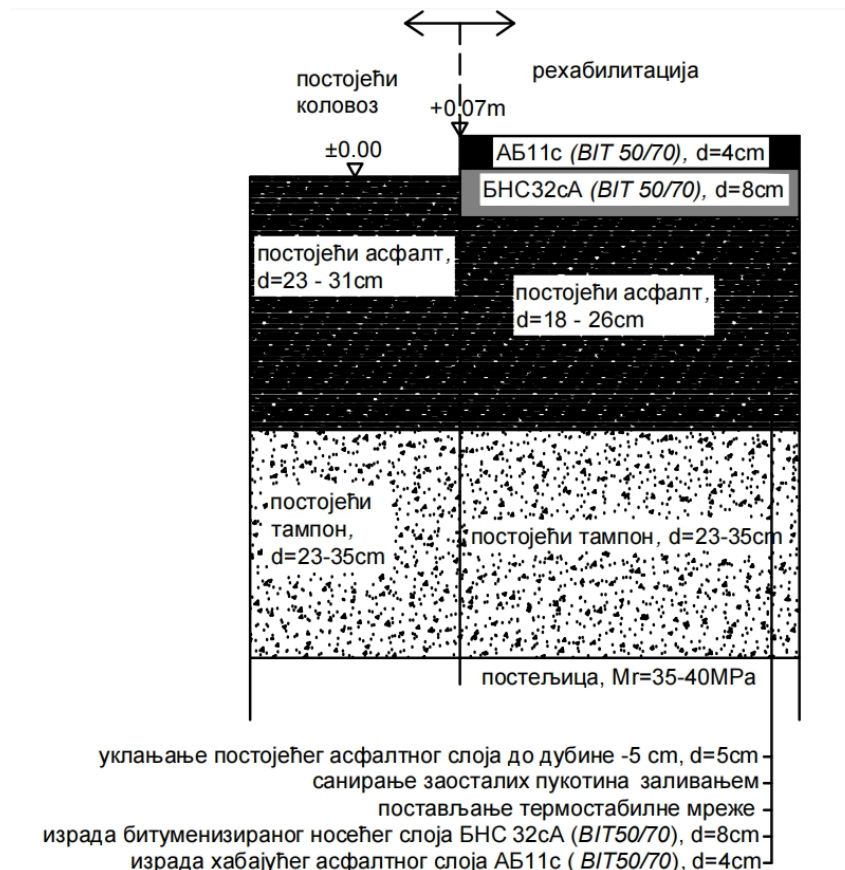
Widening-new road construction

Preparatory works on widening

- Base preparation with compaction, $E_{v2} \geq 35 \text{MPa}$

Construction of new layers of road

- Construction of layer of crushed stone aggregate 0/63mm, $E_v \geq 60 \text{MPa}$ d=30 cm
- Construction of layer of crushed stone aggregate 0/31mm, $E_v \geq 90 \text{MPa}$ d=20 cm
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=7 cm
- Installation of thermostable net
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=8 cm
- Construction of wearing layer made of RC 11c (BIT 50/70) d=4 cm



Picture 6. Solution 1 - detail

Solution 2

Solution 2 is envisaged for the following parts of the subject section, according to the following chainages:

- km 36+250 – km 37+550m

Existing road construction

Preparatory works on existing road

- Removal (scrapping) of existing asphalt layers d = 3cm
- Cleaning of asphalt layer and rehabilitation of remaining cracks with bituminous emulsion
- Installation of thermostable net

Construction of new road layers

- Construction of levelling bituminous layer BNS 32cA (BIT 50/70) d = 8 cm
- Construction of wearing layer made of RC 11c (BIT 50/70) d = 4 cm

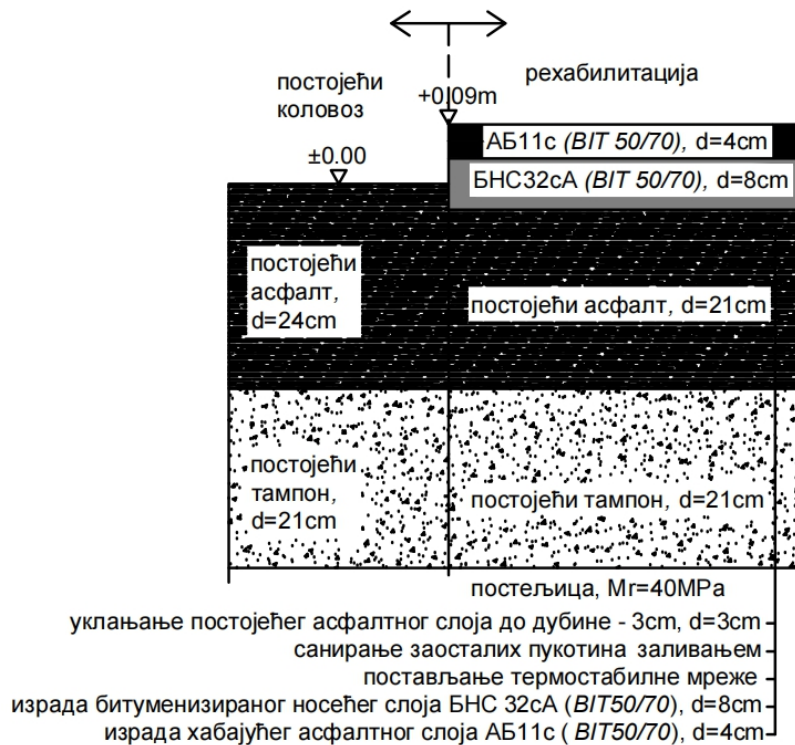
Widening-new road construction

Preparatory works on widening

- Base preparation with compaction, $E_v \geq 35 \text{MPa}$

Construction of new layers of road

- Construction of layer of crushed stone aggregate 0/63mm, $E_v \geq 60 \text{MPa}$ d=30 cm
- Construction of layer of crushed stone aggregate 0/31mm, $E_v \geq 90 \text{MPa}$ d=20 cm
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=7 cm
- Installation of thermostable net
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=8 cm
- Construction of wearing layer made of RC 11c (BIT 50/70) d=4 cm



Picture 7. Solution 2 - detail

Solution 3

Solution 3 is envisaged for the following parts of the subject section, according to the following chainages:

- km 37+550 – km 38+500

Existing road construction

Preparatory works on existing road

- Cleaning of asphalt layer and rehabilitation of remaining cracks with bituminous emulsion

Construction of new road layers

- Construction of levelling bituminous layer BNS 32cA (BIT 50/70) d = 9 cm
- Construction of wearing layer made of RC 11c (BIT 50/70) d = 4 cm

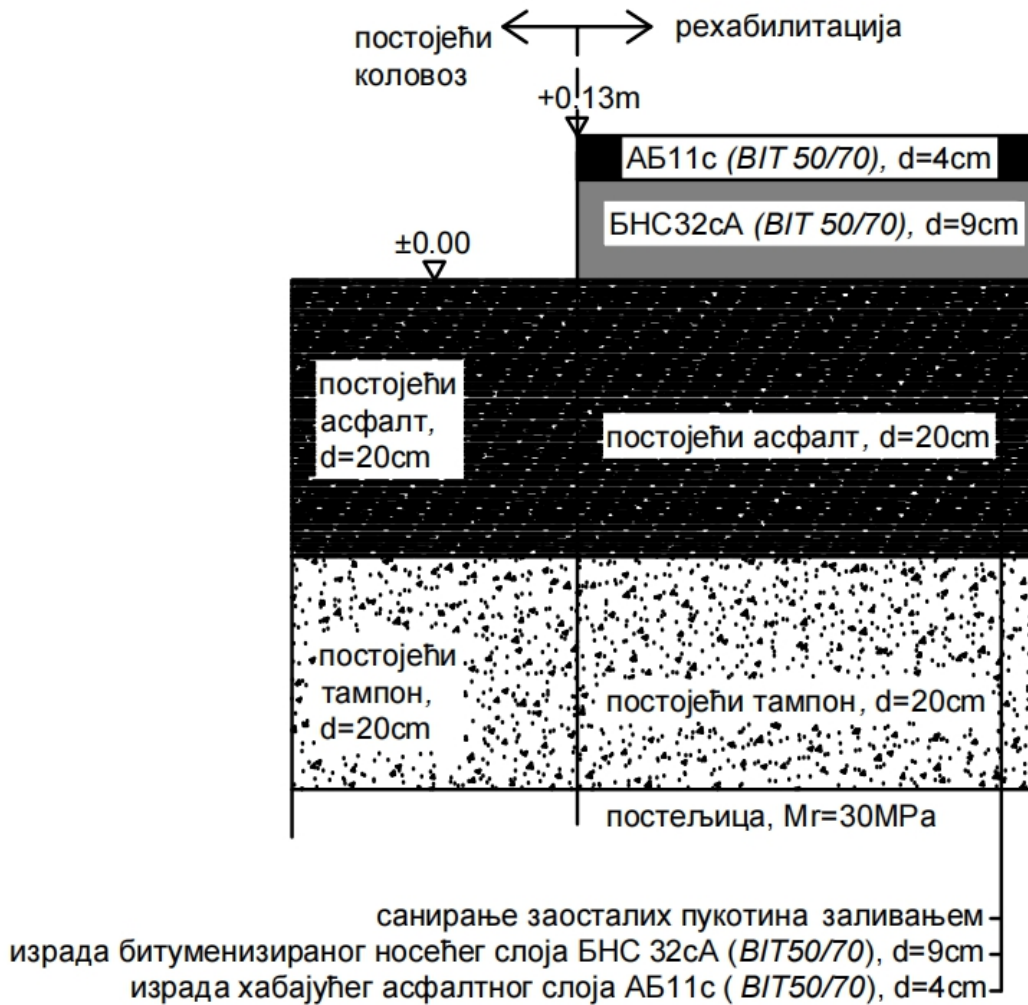
Widening-new road construction

Preparatory works on widening

- Base preparation with compaction, $E_{v2} \geq 30 \text{MPa}$

Construction of new layers of road

- Construction of layer of crushed stone aggregate 0/63mm, $E_{v2} \geq 55 \text{MPa}$ d=30 cm
- Construction of layer of crushed stone aggregate 0/31mm, $E_{v2} \geq 80 \text{MPa}$ d=20 cm
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=7 cm
- Installation of thermostable net d=9 cm
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=4 cm



Picture 8. Solution 3 - detail

Solution 4

Solution 4 is envisaged for the following parts of the subject section, according to the following chainages:

- km 58+850 – km 60+200

Existing road construction

Preparatory works on existing road

- Cleaning of asphalt layer and rehabilitation of remaining cracks with bituminous emulsion

Construction of new road layers

- Construction of levelling bituminous layer BNS 32cA (BIT 50/70) d = 10 cm
- Construction of wearing layer made of RC 11c (BIT 50/70) d = 4 cm

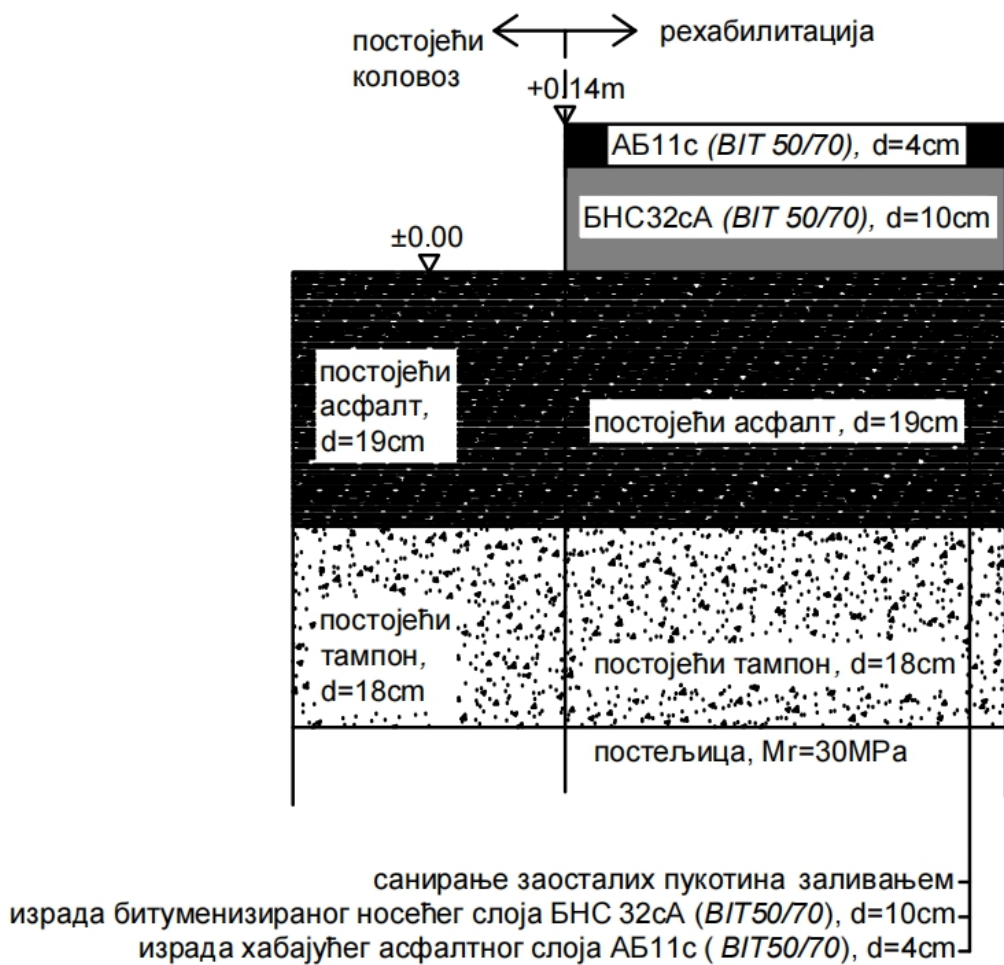
Widening-new road construction

Preparatory works on widening

- Base preparation with compaction, $E_{v2} \geq 30 \text{MPa}$

Construction of new layers of road

- Construction of layer of crushed stone aggregate 0/63mm, $E_{v2} \geq 55 \text{MPa}$ d=30 cm
- Construction of layer of crushed stone aggregate 0/31mm, $E_{v2} \geq 80 \text{MPa}$ d=20 cm
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=7 cm
- Installation of thermostable net d=10 cm
- Construction of bituminous layer BNS 32cA (BIT 50/70) d=4 cm



Picture 9. Solution 4 - detail

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

Relevant Institutions

The relevant Ministry of Environmental Protection of the Republic of Serbia is responsible for producing and implementing the environmental policy. Other relevant institutions are: PE "Roads of Serbia", Institute for Nature Conservation of Vojvodina Province (INCV) and Provincial Institute for the Protection of Cultural Monuments (PIPCM).

At an early stage of the environmental and social assessment, the client will identify if any cultural heritage is likely to be adversely affected by the project, and assess the likelihood of any chance finds. In doing so, the client will consult with relevant authorities, experts, local communities and other stakeholders as appropriate.

Based on the outcomes of the screening process, location selection and design of the project should be done in such a manner to avoid significant impacts on cultural heritage. Where the screening process identifies potential adverse impacts at the early stages of project development, preference should be given to avoiding adverse impacts during the design and site selection phases.

PE "Roads of Serbia" have, in line with the IFI's policies, requested official opinions from all the relevant institutions.

PE "Roads of Serbia" submitted a request to the Institute for Nature Conservation of Vojvodina Province (INCV) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PE "Roads of Serbia", the INCV issued a statement on conditions for nature protection 03 no. 019-107/2 dated 19.02.2021. which states that the subject road section is not inside a protected natural area.

The subject route intended for heavy maintenance goes over agricultural area, intersecting with meliorative canals which represent wildlife corridors between registered habitats of strictly protected and protected wild species. The route intersects local ecological corridors determined by Spatial Plan of the city of Sombor ("Official Gazette of City of Sombor", no. 05/2014) and eastern part of the route goes along the canal Vrbas-Bezdan which is regional ecological corridor, determined by Regional spatial plan of AP Vojvodina ("Official Gazette of APV", no. 22/11). Accordingly, the INCV issued official nature protection conditions, presented in Appendix 5.

Based on the conditions issued by the Provincial Institute for the Protection of Cultural Monuments (PIPCM) no. 02-253/2-2020 dated 06.12.2020. there are 17 archaeological sites from prehistoric, antic and medieval periods on the state road IB-15, section Sombor-Kula. If soil excavation and construction works are being conducted near these sites, they can cause destruction. Therefore, the PIPCM defined the following conditions

- At archaeological sites no soil and construction works may be conducted without previous protection measures taken.
- Necessary measures of archaeological site protection envisage full control of construction works, conducted by PIPCM.
- The investor is obliged to inform PIPCM in timely manner and in written form about the starting date of construction works in order for PIPCM to provide the archaeological control.
- In case of immovable or movable archaeological findings, Investor is obliged to stop the works and conduct the protection measures in accordance with special

conditions that are to be issued by PIPCM and enable experts to conduct archaeological exploration and documentation of findings.

The investor of the construction works is due to secure the funds for research, protection, publication and display of the finding, until it is handed over to the authorized institution.

Existing Serbian legislation

The environmental laws and by-laws in force in the Republic of Serbia are summarized in Appendix 3.

EIA procedure in the Republic of Serbia

In the Republic of Serbia the procedure for Environmental Impact Assessment (EIA) is governed by the Law on Environmental Impact Assessment, which is fully in accordance with the European Directive 85/337/EEC. PE "Roads of Serbia" submitted a request to the MoEP for the opinion on the need of starting EIA procedure for construction works for rehabilitation – heavy maintenance of the state road IB-15 (old road mark M-3), section Sombor (Industrial zone) - Kula. Received opinion states that project of road maintenance and road rehabilitation does not represent a subject of EIA, and that it is not listed in the Regulation on establishing the list of projects requiring a mandatory impact assessment and list of projects that may require an EIA, thus there is no obligation for submitting Request on the need for an environmental impact assessment.

Relevant IFIs Policies and Statements

Lender requirements that are applied to this project of road rehabilitation include the following Policies:

- World Bank's Operational Policy for Environmental Impact Assessment (OP 4.01) which requires partial EIA to be made and a suitable Environmental Management Plan for Category B projects;
- Environmental and Social Policy, EBRD;
- European Investment Bank (EIB): Statement of Environmental and Social Principles and Standards (2008).

EBRD and EIB require that the project is conducted in line with the regulative of the Republic of Serbia and EU standards. However, according to the Serbian laws for this kind of investment there is no need for Environmental Management Plan and according to the World Bank guidelines, a partial EIA and EMP has to be done for every road section.

For Category B projects, where potential adverse future environmental and social impacts are typically site specific and/or readily identified and addressed through mitigation measures, the client will undertake an environmental and social assessment that is proportionate to the project's nature, size and location, as well as the characteristics of the potential impacts and risks. The assessment will characterise potential future adverse impacts associated with the project, identify potential improvement opportunities, and recommend any measures needed to avoid, or where avoidance is not possible, minimise and mitigate adverse impacts.

3. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

The subject section belongs to the West Backa Administrative district, Municipalities of Sombor and Kula. The section in length of 22.135 km. belongs to the State Road of IB 15 (old road mark R-101) ("Official Gazette of RS", No. 93/2015), and represents part of the cross traffic link through the northwestern part of the R. of Serbia. The subject section is a part of the RRSP planned for heavy maintenance during the fourth year of the Project implementation.



Picture 10. Part of the section outside of the settlement

Settlements

The subject road section intended for rehabilitation is the part of the road that connects Sombor and Kula. The road section passes through Kljajicevo, Sivac and Crvenka.

Kula is a town and municipality located in West Backa district. According to the 2011 census Kula had 17,866 inhabitants (19,301 according to the 2002 census).

Crvenka is a small town located in municipality of Kula, West Backa district. According to the 2011 census Crvenka had 9,001 inhabitants (10,163 according to the 2002 census). Crvenka is important traffic node.

Sivac is a village located in municipality of Kula, West Backa district. According to the 2011 census Sivac had 7,895 inhabitants (8,992 according to the 2002 census). The subject road that connects Sombor and Vrbas goes through Sivac.

Kljajicevo is a settlement located in Sombor, West Backa district, 13 km away from Sombor. According to the 2011 census Kljajicevo had 5,045 inhabitants.

Sombor is a city and administrative center of West Backa district. According to the 2011 census Sombor had 47,623 inhabitants (51,471 according to the 2002 census), together

with surrounding settlements 87,815. The municipality is very well connected with regional roads to Backi Breg, Subotica, Novi Sad and Odzaci.

Watercourses and draining

Watercourses

The section crosses canals of detail canal network of hidrosystem Danube-Tisa-Danube (HsDTD) at several locations, while on the part of the route between Crvenka and Kula it goes along the canal Vrbas-Bezdan, which is a part of the main canal network of the HsDTD, at minimum distance of around 50 m. At these locations there are box and pipe culverts.

Draining

Detailed visual inspection on the whole section was conducted in order to assess the existing state of the road drainage system.

Shoulders:

Shoulders are in most parts denivelated, entrapped in grass and therefore routine maintenance is not enough, but rather heavy maintenance is required.

Ditches (drainage canals).

The assessment showed that ditches inside settlements are in good condition and well maintained. However, ditches outside settlements are filled with debris and high vegetation and therefore heavy maintenance is required.

Culverts:

It found that inlets and outlets at several culverts are entrapped in vegetation and filled, while condition of some culverts is satisfactory. Some culverts require rehabilitation of inlet/outlet elements, as well as sanation works.

Based on all above mentioned it is concluded that the drainage system is in solid condition.

Bringing into function of existing objects of draining system as well as construction of new represents one of the most important measures to improve exploitation period of the road construction.

Air

There are no significant additional sources of air pollution within the planned road section. No information on the measured air pollution values on the subject section was available.

On the basis of traffic counting performed in recent years (information available on PE "Roads of Serbia" website), no increase in the traffic volume is anticipated after heavy

maintenance. In the road rehabilitation and operational phase, no increase in the air pollutants concentration is expected.

Noise

Based on the current and expected traffic loading during and after the works, no increase in the existing noise level is expected.

4. SUMMARY OF ENVIRONMENTAL IMPACTS

The next table summary lists of the possible environmental impacts during the construction works.

Table 2. Impacts during construction works

INFLUENCE	SIGNIFICANCE	COMMENT
Impacts on land use and settlements	low	During the realization of the project, there will be no land expropriation
Ground and surface water	low	Due to low amount of water that can come to the recipient by drainage, the consequential impact is minimal to negligible. Technical documentation envisages no regulation of watercourses.
Air quality	low	Temporary impact during construction works
Flora and fauna (protected areas and species)	low	Technical documentation envisages no tree cutting. All the measures determined by the Institute for Nature Conservation of Serbia will be implemented during construction works. The INCV states that this project will have no negative effects on natural values of the area.
Monuments	low	Under the terms of the PIPCM
Noise	low	Temporary impact during construction works. The works are to be conducted only in daylight, in order to mitigate adverse effects on the population.
Access/crossing points of the main road and local roads	low	Without impact on existing crossing and access points
Soil management	low	With the application of appropriate measures of waste management.
Waste	low	Ensured through environmental management – waste and wastewater management plan will be prepared and implemented
Workers health	Moderate	Danger from COVID-19
Cumulative impacts	Moderate/low	Temporary, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only

Most of the impacts on the environment are temporary and stops after the completion of works on heavy maintenance on the section Sombor (Ind.zone) - Kula. The project is classified as environmental category B, due to a small impact on the environment. After completion of the works, increase of road traffic is not anticipated, and potential increase of vehicle speed will be regulated through a safety design, by applying active and passive speed control measures.

Construction works are to be performed solely on public surfaces, without any interference with private property. In accordance with World Bank's Operational Policy of Involuntary Resettlement (OP 4.12), this project does not require expropriation, resettlement or long-term impact on human activities.

EMP relates to the road rehabilitation phase and is part of the relevant agreement for implementation and future commitment of the Contractor. The following problems may occur during the rehabilitation works: disturbance in the traffic and movement of residents from local settlements, decreased road safety, damages on access roads, noise pollution, dust emission, inefficient waste disposal, air pollution, impact on the soil, water, flora and fauna. The works outside the site area, such as the works in a quarry, asphalt plant and borrow-pits may have local negative impact and must therefore be managed properly.

Overview of Key Impacts

EMP focuses more on the heavy maintenance phase, while activities on the regular maintenance will not be detailed in this EMP, but will only be presented in order to have an overall view of the situation.

Noise and Air Pollution in Residential Areas

It is expected that local residents will be affected with air and noise pollution during rehabilitation works on proposed road section.

Local air quality may experience some moderate and temporary deterioration due to dust from construction traffic and elevated levels of nitrogen oxide (NO_x) and sulphur oxide (SO_x) from construction equipment exhaust are the primary pollutants. The dust may settle on vegetation, crops, structures and buildings and can pose negative effects.

Noise caused by the rehabilitation works will be only a temporary impact. The construction works are to be conducted only in daylight, as defined by the Institute for Nature Conservation of Serbia. No increase of traffic density is expected after the rehabilitation, therefore no increase in the existing noise level is expected.

Possible ground and surface water pollution

During execution of works on construction of road and its subsequent operation, temporary or permanent pollution of ground and surface water may occur. This is particularly possible in cases of traffic accidents on highways when vehicles transporting oil derivatives and other hazardous substances are involved.

Impacts during construction period

Pollution that occurs during the road construction period is not permanent. Upon completion of works, with implementation of adequate protective measures, these occurrences shall be reduced, and in time completely disperse. There is a certain number of activities which, during the construction period, may cause adverse impacts on water flow and quality:

- Construction works (deep excavations, removal of topsoil, and other). These may cause disturbance in natural course of replenishment, and at the same time, removal of topsoil and creation of new basins causes muddy or otherwise contaminated water to be quickly drained into ground and also surface waters.
- Construction machinery - potential danger from leaking or accidental spilling of oil and oil derivatives, disposal of lubricants and similar waste.
- Unrestrained depositing of excavated material, accommodation of construction machines or asphalt production plant in the vicinity of surface waters.
- Usage of inappropriate construction materials.
- Unregulated drainage of waste water from worker accommodation sites, where pollution may also occur from food preparation process and toilets.

Impacts during operation

Primary sources of pollution during road operation are as follows: vehicles, precipitations and dust.

During operation phase, it may well be expected that pollution of water shall result primarily from the following:

- settling of exhaust fumes;
- tire wear;
- chassis destruction and leaking of loads;
- load spilling;
- discarding of organic and inorganic waste;
- atmospheric precipitation;
- pollution brought by wind;
- dispelling through passage of vehicles.

Pollution resulting from the aforementioned occurrences may be temporary, seasonal or accidental.

Permanent pollution is primarily related to scope, structure and characteristics of the traffic flow. Permanent sedimentation of dangerous substances on road surface and service elements of the cross sections results from traffic flow, and are washed away with precipitations. Primarily, those dangerous substances come from exhaust fumes, oil and lubricants, tire and road surface wear, chassis destruction etc.

Seasonal pollution is related to specific seasons. Typical example of this kind of pollution is usage of industrial salt during winter months. This type of pollution is characterized by large concentration of sodium and calcium salts which occur in a very short period of time (spreading of salt on road surface and consequences of melting).

Accidental pollution generally occurs during transportation of hazardous materials. Most often, it is oil and its derivatives, though also vehicles transporting some extremely dangerous chemical substances sometimes break down. The main problem in these

cases is that usually they are in very high concentration, and cannot be predicted neither in time or location. This results in the fact that very wide belts have to be protected, mostly in water supply areas, but often cat. I and II surface water.

Types of pollution and form of presence

In water drained from road surfaces, there is a vast number of harmful substances present, and their concentration is often above limits determined for direct discharge into watercourses. Usually those are fuel components such as hydrocarbon, organic and inorganic carbon, nitrogen compounds (nitrates, nitrites, ammonia and nitrogen oxides). Heavy metals that may be found here are: lead (as fuel additive), cadmium, copper, zinc, mercury, chromium and nickel.

Table 3. Sources of pollution and typical pollutants found in storm waste waters drained from the road surface.

Pollutants	Sources of pollution
Solid particles	Road surface wear, vehicles, atmosphere and road maintenance
Nitrogen and phosphorus	Atmosphere and fertilizers
Lead	Lead as tetramethyl lead from exhaust fumes, tire wear
Zinc	Tire wear, engine oil and lubricants
Iron	Rust from vehicles, metal structures on the road (bridges, bumpers), movable engine parts
Copper	Metal protective coatings, wear of engine bearings and brushes, movable engine parts, wear of brake linings, fungicides and insecticides
Cadmium	Tire wear and pesticides
Chrome	Metal protective coatings, movable engine parts, wear of brake linings
Nickel	Diesel fuel and petrol, lubricants, metal protective coating, wear of brake linings and asphalt surfaces
Vanadium	Fuel additives
Titanium	Paint for road surface marking
Manganese	Movable engine parts
Sodium - calciumchloride	Salts for defrosting
Sulfates	Roadbed, fuel and salts for defrosting
Oil and oil derivatives	Spraying and leaking of fuel, antifreeze, hydraulic oils, wetting of asphalt surface

Degree of vulnerability of surface and ground water quality in cases of accidents cannot be quantified, since they are individual cases separated in time and space. In line with assessments stated above an evaluation has been prepared on pollutant quantities which occur during operation of the road, for traffic loads in the project period, and the obtained results are shown in the form of a table. In the second column of the Table no.4 quantity of pollutant during one year for relevant traffic load (8700 vehicles per year) is given. Quantities of substances emitted by motor vehicles during one year, per one hectare of road surface for relevant traffic load (8700 vehicles per year) and for estimated traffic, as well as total quantity of pollutants on highway are also shown in Table no.4.

At the subject section Sombor (Ind.zone) - Kula of the state road IB-15, on the first subsection 01503: Sombor (Ind.zone)-Kljajicevo (Svetozar Miletic), by analysis of the data from the automatic counter ABS 2083 "Sombor" in the period of seven days of control counting, from 24.08.2020. until 30.08.2020. determined PGDS was 4489 vehicles per day. Decrease in traffic load may be connected to the COVID-19 pandemic. Considering that the traffic data in 2020 is significantly different from the previous years, due to COVID-19, year 2019 was taken as a basis for prognosis of the increase of traffic load. As a relevant load for the complete road section from year 2019 and third section, which is in total 6,751 vehicles per day.

Table 4. Estimated quantity of pollutants in storm waste waters, draining from road surface, for traffic load in the designed period

Substance	Referent values (kg/ha/yr)	Emitted quantities per area unit on highway section (kg/ha/god)	Estimated concentration of pollutants in storm waste waters from 1 ha of road surface (mg/l)	MAC ¹⁾ (mg/l)
Suspended particles	145	30	0,003	30
BOD	6,5	1,35	$1,42 \times 10^{-4}$	4,0
COD	49	10	0,001	12,0
Nitrates	0,98	0,2	$2,14 \times 10^{-5}$	10
Total phosphorus	0,13	0,027	$2,85 \times 10^{-6}$	
Oil and grease	2,25	0,47	5×10^{-5}	0,05
Copper	0,01	0,002	$2,2 \times 10^{-7}$	0,1
Lead	0,082	0,017	$1,8 \times 10^{-6}$	0,05
Zinc	0,079	0,016	$1,73 \times 10^{-6}$	0,2

¹⁾MAC-Maximum Allowed Concentration of pollutant

On the basis of spatial, engineering-geological, hydro-geological characteristics and estimated concentration of pollutants in storm waste water (shown in Table no.4), it may be concluded that during operation of the planned road section pollution of surface and ground waters will not occur in case storm water is discharged without regulation and previous treatment.

Possible soil pollution

With regard to impact on soil, there are two important phases - road construction and operation phase.

Also, there are two aspects of degradation caused by road construction: soil pollution and soil degradation.

In this phase, soil pollution may occur due to improper handling of oil and oil derivatives used for construction machines and other plants during road construction, cleaning of vehicles and mechanization outside envisaged and equipped areas, poor site development and other activities not executed in accordance with recommendations for technical protection during construction.

During road construction, issues related to impacts on soil (degradation) is mainly reflected in need for transport of huge amounts of construction material, and for formation of borrow pits and dump sites. Another important factor in this phase is the inevitable requirement for topsoiling of large areas. The topsoiling process is characterized by significant mechanical stabilization in the roadbed and on locations where temporary access roads are constructed, which may have impact (at particularly sensitive locations) on a whole range of soil parameters, primarily on soil permeability, air content etc.

Considering the scope of planned works, assumption can be made that the Contractor will have no need for formation of special area for vehicle washing and base for workers, therefore no significant impact is expected during construction period.

During road operation pollution of soil shall mostly result from the following occurrences: pollution of storm water from road surface, exhaust fumes residue, organic and inorganic waste disposal, spilling of load, accumulation of particles brought by wind, dispersal due to vehicle movement.

Among other elements, pollution is mostly related to

- road drainage system;
- traffic load and structure of traffic flow;
- configuration of surrounding terrain and its forestation;
- pollution of soil from spraying from passing vehicles is restricted to a narrow belt along the road edge;
- spilling of material from carriageway during dry periods due to air current from passing vehicles is also restricted to a narrow belt along the road edge;
- accumulation from air is present at even few hundred meter distances; at the moment it cannot be defined, nor can any regularity be found in order to quantify this occurrence.

Based on foreseen traffic density for this road section, conclusion is made that there will not be significant increase of pollutants in soil during the road operation.

Potential impact on flora

This kind of projects may have adverse impact on local flora, during construction works. These impacts include breaking of branches, removal of tree bark with construction machines, damages to root system, etc. Technical documentation envisages no tree cutting. Activities include only cutting and removal of shrubbery located inside the road parcel and that impose a security threat. The road intendand is obliged to remove this kind of vegetation on a regular basis, in order to provide safe road trip.

COVID-19

As an answer to the global crises caused by epidemics caused by virus COVID-19, EIB has developed a guideline for project promoters, which should help them continue their projects with previously determined dynamic.

COVID-19 presents many challenges to public and private sector promoters alike. These include inter alia(i) providing safe working conditions for employees, (ii) addressing the risk of infection to the community when this is caused or exacerbated by the project, (iii)

putting in place alternative mechanisms to facilitate stakeholder engagement, (iv) protecting jobs and supporting those who cannot work, (v) ensuring business continuity, (vi) being able to deal with rapidly changing national regulations and policies in response to COVID-19, and (vii) maintaining the development and construction schedule of the project, organization of the construction site and management of global supply chains.

In the context of the COVID-19 outbreak, promoters are required to undertake adequate measures (defined by WHO) in order to prevent and respond to the infection.

Potential Cumulative Impacts

The subject project will not result in any cumulative impacts. The proper implementation of the EMP would minimize any impact on local human and biotic environment that might be related with any long-term cumulative negative effects.

Other Impacts:

- Social impacts: in the construction phase, these include all social-economic conflicts, including health and safety. All temporary locations used for activities that have short-term impact are included, such as quarries and borrow-pits, locations for stockpiling surplus soil and asphalt plants are included in this. Impact of these types of activities is expected to cease when the Project is ended and the Contractor leaves the subject location;
- Solid waste: activities on the heavy road maintenance are expected to generate a certain amount of solid waste, which is collected on site and transported onto a landfill (determined by the local community in agreement with the contractors), outside the construction site.

5. ENVIRONMENTAL MANAGEMENT PLAN

Environmental impacts of the project for heavy maintenance on the state road IB-15, section Sombor (Ind.zone) - Kula will be insignificant and reversible. Mitigation measures provided in the EMP, relating to the design, construction and operational phase, must be carried out appropriately. EMP consists of the Mitigation Plan and Monitoring Plan and is based on the types of environmental impact, their scope and duration. PE "Roads of Serbia" manages the design, supervision and the Contractor in the implementation of EMP.

A. Mitigation plan

The Environmental Mitigation Plan defines the environmental impacts and measures to be implemented during the design, construction and operational phase (Appendix 1). The Plan conforms to the conditions received from the Institute for Nature Conservation of Vojvodina Province and Provincial Institute for the Protection of Cultural Monuments and valid laws. It states the locations, time frame, responsibility for its implementation and supervision. Costs of mitigation measures are included in the cost of the works. Contractor shall implement the environmental mitigation measures, include them in the total costs, and execute the works in accordance with national laws, EU standards and creditor's requests.

Protection measures – flora

Consider all the relevant measures during construction works regarding protection of trees along the road, in order to avoid any damages.

Protection measures – noise

In order to protect the local population, no construction work is to be done during night, as defined by the conditions issued by the Institute for Nature Conservation of Serbia

Site organization

Contractor shall carry out and follow the Site Organization Plan. Conditions issued by the INCV shall be included in the Site Organization Plan. Location of the facilities (warehouses, workshops, asphalt and concrete plant etc.) shall be approved by a Resident Engineer. The following conditions have to be met when selecting the location and organizing the site:

- Temporary locations for storing the construction and other material and equipment must be outside the area with high vegetation and river flood areas and limited only to the duration of the works;
- Temporary or permanent locations must be provided (the existing organized communal facilities/ landfills) for disposal and tipping of debris and other waste material in any form and communal waste produced during the works. Waste disposal/ dumping into watercourses shall be prohibited, as well as at the unorganized local waste dumps;
- After the completion of the works, all areas that have been degraded in any way by road rehabilitation works must be rehabilitated as soon as possible;

- During the works, the planned road sections and corridors around it must be followed, so that the earthworks and machinery do not affect the surrounding areas. Also, the existing road network must be used, without building new roads, to prevent habitat fragmentation;
- During the road works directly along the watercourses, river bed, river bank and littoral vegetation must be preserved as much as possible;
- Vehicle and machinery servicing on the road section shall be prohibited. In the event of a road traffic accident resulting in oil or service fluids spillage, the road area must be cleaned and reinstated;
- On the parts where the section is located in a populated area the works must be performed only during the day, to minimize the impact of noise on local residents;
- Guardrails and pedestrian crossings must be placed where necessary;
- Locations for containers for temporary tipping of communal waste produced during the works must be determined;
- The area for Contractor's facilities must be of the smallest possible size, to avoid unnecessary removal of vegetation. All facilities must be fenced;
- Appropriate drainage of the site must be provided. Locations used for car parking, workshops and fuel storages must be drained toward the oil-water separator;
- Only trained workers, who can remove any consequences of accidental spillage, may handle the fuel;
- Waste oil, oil filters and fuel must be stored on safe locations.
- Sanitary wastewater and polluted water must be discharged into waterproof pits or treated before the water is discharged into the surface water flow system, in line with the Law on Water (RS Official Gazette of RS, No 30/10, 93/12, 101/16, 95/2018, 95/2018-other law);
- Contractor must provide safety measures to prevent soil erosion and use the methods to decrease the stormwater runoff that carries eroded material;
- Excavations and machinery works must be avoided when the soil is damp;
- Upon the completion of works, machinery, construction material, containers and all other equipment must be removed in due time;
- When the site is ready to be closed, all contaminated soil must be excavated and replaced with a new layer of soil;
- Upon the completion of works, the soil must be cultivated on all the critical locations, using suitable plants which are biologically adapted to the subject climatic conditions, resistant to air pollution and visually fitting for the surrounding area. Invasive species, such as the black locust, Indigo bush, ash leaf maple, ailanthus, American ash and species that cause allergic reactions, such as poplar, should be avoided.
- in case of an accident, notify Ministry of Environmental Protection and act according to instructions from the inspection in charge.

PE "Roads of Serbia" is responsible for checking, via its Supervision Consultant, if the Site Organization Plan includes the requirements from EMP and Safety Labor Management Plan (SLMP).

Protection measures – surface and ground water

Following water protection measures should be envisaged:

- During the road works directly along the watercourses, river bed, river bank and littoral vegetation must be preserved as much as possible;

- Appropriate drainage of the site must be provided. Locations used for car parking, workshops and fuel storages must be drained toward the oil-water separator;
- Sanitary wastewater and polluted water must be discharged into waterproof pits or treated before the water is discharged into the surface water flow system, in line with the Law on Water (RS Official Gazette of RS, No 30/10, 93/12 and 101/16);
- in case of an accident, notify Ministry of Environmental Protection and act according to instructions from the inspection in charge.

Technical documentation envisages no regulation of watercourses.

On the basis of spatial, engineering-geological, hydro-geological characteristics and estimated concentration of pollutants in storm waste water (shown in Table no.4), it may be concluded that during operation of the planned road section pollution of surface and ground waters will not occur in case storm water is discharged without regulation and previous treatment.

Protection measures against COVID-19

The following basic infection prevention measures can help the containment of the spread of the disease and protect the workers and the public:

- promote regular and thorough hand-washing by employees, contractors and customers;
- discourage touching the mouth, nose and eyes;
- provide and enforce the use of Personal Protective Equipment (PPE), ensuring that there are adequate facilities to use and dispose safely of it and that staff have been properly trained on how to use and dispose of PPE. Ensure that PPE is suited to both male and female body types;
- promote social distancing;
- make sure workplaces are clean and hygienic, and regularly disinfect surfaces (such as doors, elevator buttons, floors and desks) and objects (such as telephones, keyboards and machinery);
- promote shift working where possible;
- require quarantine measures for incoming expatriate workers;

Specific prevention measures for construction sites:

Ensure physical distancing, by:

- staggering start times;
- staggering breaks;
- staggering lunches;
- restricting the number of people on-site and where they are assigned to work;
- controlling site movement (by limiting the potential for workers to gather, including personnel in material hoists and site trailers);
- holding meetings in an outside or large space to enable physical distancing;
- limiting unnecessary on-site contact between workers, and between workers and outside service providers, and encourage physical distancing in these areas (for example, by removing coffee trucks from site).

Focus attention on hygienic conditions of on-site sanitation:

- access to soap and water or alcohol-based hand sanitizer;
- washroom facilities;
- sanitizing commonly touched surfaces or areas (hoists, site trailers, door handles, machinery);
- avoiding the sharing of hand tools and power tools. If sharing is necessary, enable sanitation of shared equipment;
- posting signage on hygiene in local language as well as in the majority workplace language so everyone can understand how to do their part.

In case someone becomes ill with suspected COVID-19 at the workplace:

- put the ill person in a room or area where they are isolated from others in the workplace, limiting the number of people who have contact with the sick person
- contact the local health authorities
- identify the closest contacts with suspected COVID-19 person.

Contractor's Environmental Protection Plan

Based on the EMP, the Contractor shall prepare his Environmental Protection Plan and submit it to PE "Roads of Serbia" for approval, and by the financier. Contractor shall be obligated to follow and to implement the plan with continuous supervision of plan implementation by consultant for supervision of road rehabilitation works at the site.

The contractor is required to have a qualified and experienced person in the team, which will be responsible for coherence between the works, the environment and the EMP. PE "Roads of Serbia" will independently monitor the works, and if any irregularity is noticed, it will be transmitted to continuously present Supervision, and The Contractor will be requested to rectify such irregularities.

Contractor's Environmental Protection Plan consists of the following:

1. *Site Management Plan* – defines the procedures for setting up and functioning of a site with a view to preserving the local community and natural resources.
2. *Site Organization Plan* – description and arrangement of areas, with maintenance equipment and oil and lubricant storage facilities, including the distance from water areas;
3. *Oil and Fuel Storage Management Plan* – procedures for storing, transporting and using oil and fuel, refueling the facilities and machines, procedures for decreasing the risk of water and soil pollution. Vehicles used for refueling will have the suitable equipment used for cleaning fuel spills. All classes of spills will be reported in line with the Plan;
4. *Waste Management Plan* – contains details of temporary waste storage, waste transport and treatment before its final disposal or recycling. Licensed facilities must be used for storing solid and liquid waste and the waste leaving the site must be traceable, in accordance with the jurisdictions. As part of the Plan, Contractor shall provide chain-of-responsibility forms for the waste that leaves the site. Therefore, waste controller shall keep one copy of the form, and the driver shall have a copy, to make sure that all the listed waste is brought to the landfill. Contractor shall keep all records for audit purposes.
5. *Sewerage and Waste Water Management Plan*

6. *Soil Management Plan* – steps to be taken to minimize the effect of erosion, measures to reduce topsoil depletion, transport roads and landfills;
7. *Noise* – all the equipment must have a license and must be approved in accordance with the EU standards. This applies to all machinery, vehicles and sites where noise and vibrations affect the noise-sensitive receptors. In accordance with the Law on Protection against Environmental Noise ("Official Gazette of RS", no. 36/09, 88/10), Contractor is responsible for ensuring the noise and vibrations do not affect the local community. Contractor shall limit his works to a period from 07:00 am to 07:00 pm.
8. *Dust Emission Reduction Plan* – during the works, when dust may form, Contractor shall monitor the conditions on site and application of measures to control dust emissions, which include reduced traffic during road rehabilitation works and spraying water on the exposed surfaces;
9. *Material Excavation and Extraction Location Plan* – defines the reparation measures to be implemented for the areas of borrow-pits and access roads after the project is finished;
10. *Management Plan for Works on the River* – includes plans and procedures for water habitat and fish preservation during the works.
11. *Emergency Response Plan* – sets out the procedures for reacting in case of emergency or accidents of a bigger or smaller scale, to protect the people, property and natural resources. Equipment to be brought on site to minimize the effects of the spillage of polluting substances must be included in the Plan.
12. *Recultivation Plan* – cleaning and recultivation of the site and removal of Contractor's facilities. Contractor is responsible for clearing the site. This includes the removal of all waste material, machinery and contaminated soil. In line with the Law on Waste Management ("Official Gazette of RS", no. 36/09, 88/10, 14/10), Contractor shall develop a plan for handover, selling or removal of all vehicles and machinery, to remove them from site. All site and work areas will be rehabilitated, in order to be reinstated as much as possible. This includes stabilization and landscaping of all sites. In line with the Law on Environmental Protection ("Official Gazette of RS", no. 135/04, 36/09, 72/09,43/11, 14/16), after the works are completed, waste must not remain on site. If waste is not removed by the Contractor, PE "Roads of Serbia" is entitled to withhold payment and organize the cleaning of the area. The costs of the cleaning and the administrative costs will be included in the final payment.
13. *Plan of Environmental Complaints* – means used by the local residents and third parties affected by the project to call attention to environmental issues and file a complaint, defining how and to whom these should be addressed (Appendix 4, Grievance Mechanism);

Safety

Contractor should identify potential risks before the commencement of works. The emergency response provisions should include a Site Safety Plan, which includes a proposal for a contact person available in the event of an accident. Site Safety Plan is submitted to the Project Supervision Consultant for approval.

- Contractor shall ensure that drugs and alcohol are not used on site;
- Contractor is to include in his Site Safety Plan a provision for safe working environment and safety measures and personal protective equipment (PPE) for all workers, including gloves, hard hats, goggles, ear protection and safety footwear;

- Site Safety Plan is to include a provision for first aid to be administered on site and a trained person must be engaged in line with the Law on Occupational Health and Safety ("Official Gazette of RS", no. 101/05, 91/15);
- Contractor shall provide to his workers potable water supply, toilets and water supply for washing;
- Safety Labour Management Plan is required to ensure health and safety provisions during the works on heavy maintenance;
- Contractor shall perform all project activities following the SLMP and all Serbian laws and by-laws regarding health and safety;

PE "Roads of Serbia" and the Contractor are jointly responsible for reporting on and investigating any incidents.

Due to the increased number of vehicles on the roads through populated places, safety of local residents must be considered. Contractor shall ensure that the traffic passing through populated places is managed safely. Contractor shall provide the following:

- Safe maintenance of all trucks and equipment;
- Appropriate training and responsible behaviour of all drivers and machine operators (prescribed in the Contractor's Site Safety Plan);
- Ensuring that all the truck load which may create dust emissions is covered and secured (e.g. excavated soil and sand);
- Safety and instant removal from site of the drivers who disregard any of the conditions regarding the safety of the local community;
- Obeying speed limits;

Before the works start, Contractor shall submit all the above listed plans to PE "Roads of Serbia" for their approval. After the works are completed Contractor shall reinstate the location into its original condition.

Operational Phase

In the road operational phase, special attention must be paid to safety of pedestrians, by using measures for traffic calming in the vicinity of schools and populated areas, improving road signs and markings, keeping a record of traffic accidents that are recurring on some locations, and marking them as black spots.

Regular road maintenance consists of the following: grass mowing, cleaning the drainage system, road patching and various repairs and regular checks and maintenance of drainage structures. Seasonal maintenance, regular maintenance of safety characteristics and road signs shall be performed as needed. Primary road maintenance, which includes asphaltting and major repairs, is usually planned for a period of a few years.

B. Monitoring plan

Basic components of the Monitoring Plan are:

- Environmental issue to be monitored and means of verification;
- Specific areas, locations and parameters to be monitored;
- Valid standards and criteria;
- Monitoring noise levels near populated areas;
- Monitoring material supply (verification of valid licenses);

- Duration, frequency and evaluation of monitoring costs;
- Institutional responsibility for monitoring and supervision.

A monitoring control list is prepared on the basis of EMP and Monitoring Plan (Appendix 2). The list is used by the supervision engineer on site. Signed control lists are submitted to PE "Roads of Serbia", which is responsible for compliance monitoring and reporting. PE "Roads of Serbia" will have a Database of grievances, listing the information on complaints received from local communities and other interested parties. This includes: type of grievance, place, time, actions to be taken to resolve the grievance and the final outcome.

C. Institutional implementation and reporting arrangements

Project Implementation

PE "Roads of Serbia" is the institution responsible for implementing the project in accordance with the EMP and Monitoring Plan. Day-to-day project implementation and monitoring its compliance is the responsibility of the Project Supervision Consultant.

Contractor will provide the results of "zero monitoring" prior to the start of the works, during the mobilization stage. Project Proponent shall do the following to ensure that the Contractor implements the proposed mitigation measures in the construction phase:

- Contractor shall prepare Contractor's Environmental Protection Plan and take all steps to mitigate ecological effects as stated in the Environmental Mitigation Plan (Appendix 1);
- Contractor should not be compensated for the costs of the required mitigation measures and monitoring activities in the form of a specific item in the total price, except for the analysis of the quality of water and noise measuring. Contractor will be deemed to have included these costs in the total price. The actual costs of the analysis of water quality and noise measuring will be paid to the Contractor as part of a specific item in the total price. Failure to follow the requested environmental mitigation measures on the Contractor's part will result in penalizing the Contractor in the form of negative points. Negative points have been established as a measure to stimulate the Contractor to perform his obligations in an organized and timely manner and perform his duty with a high degree of excellence. Negative points consist of two elements – numerical and financial. Each negative point is connected to a sum, representing a permanent reduction in payment for the determined non-conformances in contractual obligations. The number of negative points earned has a cumulative effect. Should the Contractor receive more than a certain number of negative points stated in the Contract, he will not be allowed to participate in PE "Roads of Serbia" tenders in the next two years. Also, if the Contractor is awarded a certain number of negative points, the employer has the right to break the contract. Monetary value of each negative point and the deadlines for other possible actions by the employer must be clearly stated in the contract. Explanation for the application of these two measures – fees for specific costs and penalties for non-compliance should provide the implementation of all the requested environmental mitigation measures and monitoring activities.
- Contractor must be explicitly requested to employ an environmental expert. Contractor will be responsible for implementing environmental mitigation

measures during road rehabilitation works and should employ an environmental specialist who will supervise the implementation of Contractor's environmental responsibilities. This person will coordinate the work of the Contractor, PE "Roads of Serbia" and the relevant ministry and will deal with every complaint received during the project implementation. In the course of the project, PE "Roads of Serbia" will monitor if the Contractor complies with EMP provisions. Project Supervision Consultant is advised to employ an environmental expert (with knowledge of civil engineering and environmental management), to assist in environmental monitoring.

When the project is completed, PE "Roads of Serbia" will be responsible for the operation and maintenance of roads. Routine and random monitoring will be undertaken as scheduled in the Monitoring Plan.

PE "Roads of Serbia" shall also be responsible for the following:

- Implementation of the requests for environmental protection provided by: State environmental authorities, IFIs and other institutions, Law on Environmental Protection ("Official Gazette of RS", no. 135/04, 36/09, 72/09, 43/11, 14/16);
- Implementation of the requests for environmental protection through Contractor's specifications;
- Project supervision via consulting services for supervision and project implementation;
- Environmental monitoring supervision via consulting services for environmental monitoring;
- Preparation of final environmental reports.

Before the start of the road rehabilitation works, the Contractor will provide a proposal for environmental protection, including the safety of persons involved with the works, as part of the EMP. The proposal will be reviewed by PE "Roads of Serbia" for acceptance. With respect to that, particular emphasis must be placed on:

- Taking all reasonable steps to protect the environment during the commencement and completion of site works, so as to avoid damage of property or disturbance to the people, resulting from the existence of a site;
- Maintaining safe conditions for all persons entitled to be on site;
- Providing lighting, security guard, fences, warning signs and traffic controls, aiming to protect the works and other property, but also public safety and interest.

MoEP will have the authority to stop the works directly if the performance is not in line with the environmental standards and regulations. The inspection will then inform PE "Roads of Serbia" about the suspension. The Design will be amended subsequently with public disclosure feedback.

The Contractor Reporting Arrangements

1. Contractor to PE "Roads of Serbia"

Contractor will prepare his compliance reports in respect to EMP and Contractor's Project Implementation Plan as quarterly progress reports and will submit them to PE "Roads of Serbia" in English and Serbian, both in hard copy and in electronic copy.

Contractor will provide quarterly reports to PE "Roads of Serbia" which document environmental mitigation measures, together with the prescribed monitoring activities performed in the reporting period. Contractor will take due care of the quality of the environment, in accordance with Mitigation Plan and Monitoring Plan, which form an integral part of the EMP and will provide quarterly reports to PE "Roads of Serbia".

In the event of any accidents or environmental threats, there will be immediate reporting about these events. Contractor shall inform the project manager and local authorities immediately after the accident. If the project manager is not available, Contractor shall inform PE "Roads of Serbia" about the accident (phone number 0800 100 104 or by e-mail: info.centar@putevi-srbije.rs).

Contractor shall monitor the quality of the environment in line with the Monitoring Plan which is an integral part of the EMP and will report to PE "Roads of Serbia" on quarterly basis. These reports will include a list and details of all the activities performed on the location and the results of on-site investigation, in addition to the recommendations for future site activities and safeguard measures.

2. Project Supervisor Consultant to PE "Roads of Serbia"

Conclusions of regular monitoring activities, including the activities stated in the Monitoring Plan, performed by the Contractor, will be included in the quarterly progress report.

In the case of an accident or environmental threat, these events must be reported immediately.

3. PE "Roads of Serbia" – MoCTI – EBRD

Annual Health and Safety and Environmental Report, including the indicators for monitoring and reporting on the implementation of the conditions established in the EMP will be prepared by PE "Roads of Serbia" and submitted to EBRD for their consideration. EBRD will review the reports and verify their content in periodic site visits. PE "Roads of Serbia" will provide annual reports to the MoCTI and EBRD regarding the status of the Contractor's implementation of mitigation measures, additional mitigation measures to be realized, cases of non-compliance, complaints received from the local residents, NGOs etc. and the manner in which they were addressed.

In the event of any lethal or major incidents on site, PE "Roads of Serbia" will immediately report those to the Bank that finances the section of the road.

6. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

As requested by EBRD's Environmental and Social Policy, public consultations were held in the EMP preparation. EMP and other project-related information were disclosed to the public and made available to the local community.

PE "Roads of Serbia" office	Vlajkovičeva 19a, Belgrade tel: +381 11 30 40 700
Local community centers	City Administration of City of Sombor Cara Uroša Square 1
	Municipality of Kula Lenjinova Street 11
Web sites	https://kula.rs https://www.sombor.rs http://www.putevi-srbije.rs

A detailed report on the public consultation process is shown in Appendix 4 to this document and contains a list of participants identified, which will be updated accordingly.

Consultation with users will be made during the road rehabilitation stage, while all the records of environmental and social issues, complaints received during consultation, site visits, informal discussions, formal reports etc. will be monitored, recorded and kept in PE "Roads of Serbia" project office.

Before the start of the works, PE "Roads of Serbia" will provide information using the following:

- Newspaper articles in one of the national and one of the local media,
- Posters on the main notice board in all local community offices of communities potentially at risk,
- Radio announcements on traffic diversions,
- Providing contact with the person responsible and nominated for working with the local communities.

A grievance mechanism will be implemented to ensure that the complaints from local communities are appropriately addressed, corrective measures taken and complainants informed about the outcome. This applies to the complaints of all interested parties. The complaint form is shown in the Appendix 4, while hard copies will be available in local community centers.

The Report on Public Consultation is presented in Appendix 4 to this EMP.

7. REFERENCES

- Environmental Assessment No 25, Environmental Management Plans, World Bank Environment Department, January 1999.
- Environmental and Social Policy, EBRD, 2014.
- The EIB Statement of Environmental and Social Principles and Standards, 2009.;
- Environmental and Social Standards, EIB, 2018.;
- Environmental Management Framework Document, PE “Roads of Serbia”, 2013.
- Technical Guidelines – Environmental Impact Assessment in road sector, PE “Roads of Serbia”, 2011.
- Environmental Impact Assessment within the road sector, PE “Roads of Serbia”, 2009.
- Guidance note to EIB promoters On environmental and social performance in EIB-financed operations in response to the COVID-19 outbreak crisis, May 2020.

APPENDICES

Appendix 1 MITIGATION PLAN

MITIGATION PLAN

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
Pre-construction	Technical Documentation			
	Technical documentation in conflict with EMP	The Designer is obliged to make design documentation in line with EMP	Designer	Technical control / PE "Roads of Serbia"
	Following the environmental protection procedure	Conditions from the Institute for Nature Conservation of Vojvodina Province and Provincial Institute for the Protection of Cultural Monuments are obtained to avoid environmental risks	PE "Roads of Serbia" and Designer-Consultant	PE "Roads of Serbia"
	Site location and organisation will be approved by PE "Roads of Serbia" and selected so as to:	<ul style="list-style-type: none"> - be outside of the river banks of watercourses in the vicinity - have no impact on the environment and the local community (noise, dust, vibrations etc.) - be outside the high vegetation area - minimise the size of the facilities to minimise the unnecessary removal of vegetation - have the sanitary waste water discharged into waterproof tanks or treated before the water is discharged into the surface water system, in accordance with the Law on Water ("Official Gazette of RS", no. 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018 - other law) - properly drain the locations. Paved areas, including parking areas, workshops and fuel storages must be drained toward an oil-water separator - whenever possible, limit the area to be cleared and avoid topsoil degradation - the material removed will be collected, disposed and/ or re-used as needed - prevent soil erosion on site - contractor is responsible for implementing the measures for erosion protection - contractor shall limit the scope of the excavations to mitigate soil 	PE "Roads of Serbia" Contractor	PE "Roads of Serbia"

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		erosion - contractor shall implement soil conservation method in sensitive areas to prevent or minimize the storm water runoff, which causes material erosion - contractor is to avoid excavation and machine operations in damp site conditions.		
	Selection of the location for temporary settlement construction, in the vicinity of or within an existing settlement Influence on public health and sociological circumstances	- minimum distance must be kept (buffer zone) between the site and the nearest populated area - influence of the local conditions must be accounted for (wind) to avoid or minimise harmful effects -contractor's EMP defines health and safety and environmental measures - independent water and electricity supply, in addition to a medical service station on site must be planned for. - apply the measures for prevention of infection spreading given in EMP	Contractor	PE "Roads of Serbia"
	Road safety issues associated with pedestrian crossing	Plan for safe and adequate pedestrian crossing facilities that can be in most cases over passages equipped with ramps and structures that allow the use of wheelchairs, pushcarts, bicycles and prams.	Designer-Consultant	Technical control / PE "Roads of Serbia"
	Stakeholder engagement	Details of the proposed road route, access points and safety features will be disclosed at the location of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been considered will be recorded in the technical documentation	PE "Roads of Serbia" and Designer-Consultant	Technical control / PE "Roads of Serbia"
Construction	Management plans			
	Contractor shall prepare the implementation of the Plans described in the EMP, to ensure that the legislation and Creditor's requirements have been met: - Site Organisation Plan - Sewerage and Wastewater Management Plan - Soil Management Plan - Dust Management Plan		Contractor	Supervision / PE "Roads of Serbia"

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	<ul style="list-style-type: none"> - A plan indicating the location of borrow-pits, and measures for recultivation of borrow-pits and access roads after the project is completed - Waste and Wastewater Management Plan, in line with the Law on Waste Management ("Official Gazette of RS", no. 36/09) - Oil and Fuel Storage Management Plan - In-river Works Management Plan - Emergency Response Plan - Complaints Procedure - Safety and Hazard Assessment - Safety and Labour Management Plan 			
Construction	Site Induction			
	All workers and visitors to the site shall be given a health and safety induction and instructed on the need to use PPE.	Contractor	Supervision / PE "Roads of Serbia"	
Construction	Material Supply			
	asphalt plant: dust, fumes, health and safety of workers, ecosystem disturbance	<ul style="list-style-type: none"> - use the existing asphalt plants; - requirement for official approval or valid operating license 	asphalt plant	asphalt plant
	quarry: dust, health and safety of workers, ecosystem disturbance	<ul style="list-style-type: none"> - use the existing quarries; - requirement for official approval or valid operating license 	quarry	quarry
	sand and gravel borrow-pits: river bed disturbance, quality of water, ecosystem disturbance	<ul style="list-style-type: none"> - use the existing borrow pits or buy material from licensed separation facilities; - requirement for official approval or valid operating license 	contractor or gravel and sand separation facility	contractor or gravel and sand separation facility

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
Construction	Material Transport			
	asphalt: dust, fumes	- all trucks need to be covered - contractor's machinery to be carefully selected	truck operator	truck operator
	stone: dust	wet truck load	truck operator	truck operator
	sand and gravel: dust	wet truck load	truck operator	truck operator
	management of traffic noise, exhaust fumes and road congestion	- haul material at off-peak traffic hours (9-14h) - use alternative roads to avoid main roads - proper road signs and markings of the site, to minimise chances of a wrong turn	transport manager truck operator	transport manager truck operator
	Possibility of encountering an archaeological site	if an archaeological site is encountered, contractor shall immediately suspend the works and inform IPCM and PE "Roads of Serbia".	contractor	contractor's supervision
Construction	Construction Site			
	negative impact of noise on the workers and local community	- limit the activities to daylight working hours - use equipment with noise mufflers, licensed and approved in accordance with the EU standards - use noise barriers for the works that produce noise for more than one day on the same location. - locate noise-making equipment as far away as possible from residential buildings and other noise-sensitive receptors.	contractor	contractor's supervision
	dust	- spray the problematic areas on site with water - cover the material stored and limit vehicle speed - implement the Dust Management Plan: measures for avoiding dust emission, including hoarding, spraying the problematic areas, accesses, material and stockpiles during the loading and unloading	contractor	contractor's supervision

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		activities, covering the trucks that carry dusty material, washing the trucks etc.		
	vibrations	<ul style="list-style-type: none"> - limit activities to daylight working hours - if there is material damage to the local houses, buildings and infrastructure (access roads included) caused by the works, the damage will be compensated for and will have to be rectified - locate the equipment for earth works as far away as possible from vibration-sensitive receptors 	contractor	contractor's supervision
	traffic disruption during construction activities	<ul style="list-style-type: none"> - Traffic Management Plan with appropriate measures for traffic diversions that can be easily noted and followed, including traffic police assistance - Traffic Management Plan which will define a speed limit for the construction vehicles and organize traffic in such a way that populated areas are avoided as much as possible - during the works, maximum use of the existing road network. Avoid the construction of new temporary roads, which would increase the habitat fragmentation - inform the local community about the works planned 	contractor	contractor's supervision
	Potential impact on flora	Consider all the relevant measures during construction works regarding protection of trees along the road, in order to avoid any damages.	contractor	contractor's supervision
	Potential impact on water	<ul style="list-style-type: none"> •Appropriate drainage of the site must be provided. Locations used for car parking, workshops and fuel storages must be drained toward the oil-water separator; •Sanitary wastewater and polluted water must be discharged into waterproof pits or treated before the water is discharged into the surface water flow system, 	contractor	contractor's supervision

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	reduced access to roadside activities	provide an alternative access to roadside activities at all times	contractor	contractor's supervision
	safety of vehicles when / where there are no construction activities	lighting and well-defined safety signs and protection measures	contractor	contractor's supervision
	soil and water pollution from improper material storage, management and use	<ul style="list-style-type: none"> - organise and cover material storage areas - isolate the concrete, asphalt and other from the watercourse by using sealed formwork or covers - isolate the areas for washing the concrete or asphalt trucks and other equipment from the watercourse by choosing areas for washing which are not freely drained directly or indirectly into the watercourse - organize the site so as to minimize the risk of generating sediments and accumulating waste water, which could cause pollution of the surrounding soil and water - Soil Management Plan to provide controlled removal, storage and re-use of topsoil - use local controlled measures to prevent sediment flowing into surface water and drainage channels. Some of the measures include physical obstacles such as fences, mulch barriers, geotextile, rock groynes, sediment basins. - to prevent sediment flowing into surface water, slope of the soil and protection form wind erosion must also be considered, by installing fences, covers etc. - any deposits of excess soil, stone etc. may only be temporary, until the works have been completed. After that, excess soil, stone and other waste material must be removed and complete rehabilitation of all areas degraded by the works must be done. 	contractor	contractor's supervision
	soil and water pollution from improper waste material disposal	<ul style="list-style-type: none"> - dispose waste material at a location protected from washing out, on a marked location, if not on site, then on an authorised landfill (It is very important recommendation that the authorized landfill is sanitary and in accordance with the European standards and regulations of the Republic of Serbia) - dispose waste in accordance with best international practice (IFC, EHS – general guidelines). 	contractor	contractor's supervision

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		<ul style="list-style-type: none"> - apply additional measures for storing hazardous waste (secondary containment, limiting the access, providing PPE etc.) to prevent negative effects on the workers, local community or environment - nominate a person responsible for waste collection and storage (hazardous and non-hazardous) 		
	potential contamination of soil and water from improper maintenance and fuelling of equipment	apply the best engineering practice in handling and safe storage of lubricants, fuel and solvents, ensure proper loading of fuel and equipment maintenance, collect all waste and dispose it on authorised recycling locations	contractor	contractor's supervision
	soil and water pollution from improper waste material disposal	<ul style="list-style-type: none"> - transport the waste in marked vehicles designed for waste transport, to minimise the risk of releasing hazardous and non-hazardous substances - train the drivers in handling and disposal of the load they transport and transport documents describing the nature of the load (waste) and its degree of hazard 	contractor	contractor's supervision
	safety of workers	<ul style="list-style-type: none"> - provide workers with safety instructions and PPE - provide a safe alternative traffic flow 	contractor	contractor's supervision
	areas temporarily occupied	<ul style="list-style-type: none"> - undertake re-vegetation with native species and monitor the effects (avoid invasive species those that cause allergic reactions) -where initial plantings were not successful, carry out re-planting 	contractor	contractor's supervision
Operation	Maintenance			
	negative impact of noise on local residents and workers	<ul style="list-style-type: none"> - limit activities to daylight working hours, or as agreed with the authorities - use the equipment with noise mufflers installed 	maintenance contractor	maintenance contractor's supervision
	potential air, water and soil pollution: dust, exhaust fumes, spilt fuel, oil and lubricants	<ul style="list-style-type: none"> - apply the best engineering practice in handling and safe storage of lubricants, fuel and oil - ensure proper loading of fuel and maintenance of equipment - collect and dispose all waste in accordance with the Law on Waste 	maintenance contractor	maintenance contractor's supervision

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		Disposal - properly organise and cover the areas for material storage - isolate concrete and asphalt works from the watercourse by using sealed formwork - isolate the area for washing trucks for the transport of concrete and asphalt and all other equipment from the watercourse, by choosing the area for washing where the water is not freely drained directly or indirectly into the rivers - dispose the waste material to suitable locations protected from washing out		
	vibrations	limit activities to daylight working hours, or as agreed with the authorities	maintenance contractor	maintenance contractor's supervision
	safety of workers	- provide workers with safety instructions and PPE - organise safe traffic bypass	maintenance contractor	maintenance contractor's supervision
	increased vehicle speed	install speed limit signs	maintenance contractor	maintenance contractor's supervision
	erosion, rockfall, hazardous situation	install suitable warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal crossing, slow traffic zone), reflective markings indicating steep slopes or convex mirrors in curves where there is a lack of visibility, warning signs on locations considered appropriate in line with good engineering practice or as agreed with the authorities	maintenance contractor	maintenance contractor's supervision

Appendix 2 MONITORING PLAN

MONITORING PLAN

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
Construction	Material supply					
<i>asphalt plant</i>	possession of an official approval or valid (operating) license	asphalt plant	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the plant with the health and safety and environmental requirements	plant manager
<i>quarry</i>	possession of an official approval or valid (operating) license	quarry	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the quarry with the health and safety and environmental requirements	quarry manager
<i>sand and gravel borrow-pit</i>	possession of an official approval or valid (operating) license	sand and gravel borrow-pit or separation facility	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the borrow-pit with the health and safety and environmental requirements	borrow-pit or separation facility manager
Construction	Material transport					
<i>asphalt</i>	truck load covered	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
<i>stone</i>	truckload covered or wetted	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
<i>sand and gravel</i>	truckload covered or wetted	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
<i>traffic management</i>	hours and routes selected	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
Construction	Construction site					
<i>negative effects of noise on the workers and local residents</i>	noise levels	site; nearest homes in the local settlement	sound meter with suitable software	-once at the beginning of the project and later quarterly -after receiving a complaint -if the monitoring results are not satisfactory, monitoring to be done on monthly basis	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	contractor (monitoring)
<i>dust</i>	air pollution (suspended solids)	on and near the site	inspection and visual observation	unannounced inspections during material delivery and construction works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision (monitoring)

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
<i>vibrations</i>	limited time of activities	site	supervision	unannounced inspections during construction works and after a complaint is received	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
<i>disruptions to traffic during construction works</i>	existence of a Traffic Management Plan and traffic pattern	on and near the site	inspection and visual observation	prior to the start of the works; once a week in peak and non-peak hours	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
<i>reduced access to roadside activities</i>	alternative access provided	site	supervision	random checks at least once a week during the construction works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
<i>safety of vehicles where there are no construction activities</i>	visibility and suitability	on and near the site	observation	random checks at least once a week in the evening	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
<i>water and soil pollution resulting from improper material storage, management and use</i>	soil and water quality (suspended solids, oils, ph values, conductivity)	At the water stream	unannounced sampling, analysis in a certified laboratory possessing the required equipment	at least three times for the entire Project duration, monitoring to be done before the construction (or at a reference point upstream of the site) during and after the rehabilitation works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor (monitoring)
<i>safety of workers</i>	PPE; bypass traffic organisation	site	inspection	unannounced inspections during the works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	supervision contractor
Operation	Maintenance					
<i>negative effect of noise on the workers and local residents</i>	noise levels	site; nearest homes	sound meter with suitable software	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS
<i>vibrations</i>	limited time of activities	site	supervision	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility
						Implementation
<i>safety of workers</i>	PPE; bypass traffic organisation	site	inspection	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS
Operation	Road safety					
<i>increased vehicle speed</i>	condition of traffic signs; vehicle speed	road section included in the design	visual observation; radar speed detectors	during the maintenance activities; unannounced	ensure a safe and economical traffic flow	maintenance contractor; traffic police
<i>erosion, rockfall and hazardous situations</i>	condition of traffic signs	road section included in the design	visual observation	during the maintenance activities	ensure a safe and economical traffic flow	maintenance contractor, monitoring

Proposed template – additional data required that should be incorporated into monitoring plans:

1. General		
Is the project materially compliant with all relevant EBRD Performance Requirements (taking account of agreed action plans, exemptions or derogations)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If No, please provide details of any material non-compliances:
Is the project materially compliant with all applicable environmental and social laws and regulations?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If No, please provide details of any material non-compliances:
Have there been any accidents or incidents that have caused damage to the environment, brought about injuries or fatalities, affected project labour or local communities, affected cultural property, or created liabilities for the company?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe, including details of actions to repair and prevent reoccurrence:
Have there been any changes to environment, social, labour or health and safety laws or regulations that have materially affected the company?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe:
How many inspections did you receive from the environmental authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
How many inspections did you receive from the health and safety authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
How many inspections did you receive from the labour authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:
Have these visits resulted in any penalties, fines and/or corrective action plans?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe, including status of implementing corrective actions to address any violations found:
Has the Company engaged any contractors for project-related work in the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state for which types of work, and how the company has monitored the compliance of contractors with EBRD Performance Requirements and the Environmental and Social Action Plan:
Were any of the violations stated above the responsibility of contractors?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Contractor?
Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or labour reasons?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe:

Please describe any environment or social programs, initiatives or sub-projects undertaken during the reporting period to improve the company's environmental or social performance and/or management systems:

Please indicate the level of associated expenditure (capital expenditure and operating expenditure), and whether this relates to the requirements of the Environmental and Social Action Plan, or to any other initiative:

2. Status of the Environmental and Social Action Plan

Please provide information on the status of each item in the Environmental and Social Action Plan (ESAP) agreed with EBRD. If the ESAP has been updated during the reporting period, please attach a copy of the new plan.

3. Environmental Monitoring Data¹

Please provide the name and contact details for your environmental manager:

Parameter ²	Value ³	Unit	Compliance Status ⁴	Comments ⁵
Waste Water				
Total waste water generated				
BOD				
COD				

¹ Please provide the results of any environmental monitoring carried out by the Company or its consultants. If you already have all the data requested available in another format, then this can be used instead.

² Not all parameters will necessarily apply. Please complete those rows that are most relevant to the industry sector. Additional parameters can be added as necessary.

³ Please ensure that the units of measurement are clearly stated

⁴ Please report on compliance against the standards agreed with EBRD for this project (typically local, EU and/or World Bank Group)

⁵ In addition to any other comments, please indicate whether the measurements reported apply to all or only some process operations at the facility

Please provide the name and contact details for your environmental manager:				
Parameter ²	Value ³	Unit	Compliance Status ⁴	Comments ⁵
Suspended Solids				
Phosphorus				
Nitrates				
Heavy metals				
[Other]				
Air Emissions				
SO ₂				
NO _x				
Particulates				
CO ₂				
CH ₄				
N ₂ O				
HFCs				
PFCs				
SF ₆				
[Other]				
Other Parameters				
Noise				
[Other]				
Solid Waste				
Please provide details of the types and amounts of solid wastes generated by the project. Indicate where wastes are classified as hazardous. Indicate the final re-use, recycle or disposal method for each waste type.				

Please provide the name and contact details for your environmental manager:				
Parameter ²	Value ³	Unit	Compliance Status ⁴	Comments ⁵

4. Resource Usage and Product Output			
Parameter	Value	Measurement Unit	Comments ⁶
Fuels used			
Oil			
Gas			
Coal			
Lignite			
Grid Electricity			
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
Product 1			
Product 2			

⁶ In addition to any other comments, please indicate whether the measurements reported apply to all or only some process operations at the facility. Please include any fuel quality parameters (e.g. calorific value).

5. Human Resources Management			
Please provide the name and contact details for your Human Resources manager:			
	Total	Recruited in this reporting period	Dismissed in this reporting period
Number of direct employees:			
Number of contracted workers:			
Were there any collective redundancies during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, how they were selected, consultation undertaken, and measures to mitigate the effects of redundancy:	
Are there any planned redundancies to the workforce in the next year?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, and selection and consultation process:	
Were there any changes in trade union representation at Company facilities during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details, and summarise engagement with trade unions during reporting period:	
Were there any other worker representatives (e.g. in the absence of a trade union)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details and summarise engagement with them during reporting period:	
Were there any changes in the status of Collective Agreements?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details:	
Have employees raised any grievances with the project during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state how many, split by gender, summarise the issues raised in grievances by male and female staff and explain how the Company has addressed them:	
Have employees raised any complaints about harassment or bullying during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state how many, split by gender, summarise the issues raised by male and female staff and explain how the Company has addressed them:	
Have there been any strikes or other collective disputes related to labour and working conditions at the Company in the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please summarise nature of, and reasons for, disputes and explain how they were resolved	

<p>Have there been any court cases related to labour issues during the reporting period?</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>If yes, please summarise the issues contested and outcome:</p>
<p>Have there been any changes to the following policies or terms and conditions during the reporting period in any of the following areas:</p> <ul style="list-style-type: none"> • Union recognition • Collective Agreement • Non-discrimination and equal opportunity • Equal pay for equal work • Gender Equality • Bullying and harassment, including sexual harassment • Employment of young persons under age 18 • Wages (wage level, normal and overtime) • Overtime • Working hours • Flexible working / work-life balance • Grievance mechanism for workers • Health & safety 	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>	<p>If yes, please give details, including of any new initiatives:</p>

6. Occupational Health and Safety Data

Please provide the name and contact details for your Health and Safety manager:					
	Direct employees	Contracted workers		Direct employees	Contracted workers
Number of man-hours worked this reporting period:			Number of Fatalities ⁷ :		
Budget spent on OHS in this period (total amount and currency):			Number of disabling injuries:		

⁷ If you have not already done so, please provide a separate report detailing the circumstances of each fatality.

OHS training provided in this period in person-days:			Number of Lost Time Incidents (including vehicular) ⁸ :		
Number of lost workdays ⁹ resulting from incidents:			Number of cases of occupational disease:		
Number of sick days:					
Accident causes (falling, heavy loads, struck by object, contact with energy source etc.):					
Please provide details of any fatalities or major accidents that have not previously been reported to EBRD, including total compensation paid due to occupational injury or illness (amount and currency):					
Please summarise any emergency prevention and response training that has been provided for company personnel during the report period:					
Please summarise any emergency response exercises or drills that have been carried out during the report period:					
7. Stakeholder Engagement					
Please provide the name and contact details for your external relations or community engagement manager:					
Please provide information on the implementation of the stakeholder engagement plan agreed with EBRD and summarise interaction with stakeholders during the reporting period, including:					
<ul style="list-style-type: none"> - Meeting or other initiatives to engage with members of the public or public organisations during the report period, - information provided to members of the public and other stakeholders during the report period relating to environmental, social or safety issues - coverage in media, - and interaction with any environmental or other community groups. 					
Please describe any changes to the Stakeholder Engagement Plan agreed with EBRD:					

⁸ Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.

⁹ Lost workdays are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

How many complaints or grievances did the project receive from members of the public or civil society organizations during the reporting period? Please split by stakeholder group. Summarize any issues raised in the complaints or grievances and explain how they were resolved:

8. Status and Reporting on Resettlement Action Plan/Livelihood Restoration Framework

Existing Land Acquisitions
 Please report any further progress made during this reporting period in the implementation of the Resettlement Action Plan (RAP) or Livelihood Restoration Framework (LRF), using the monitoring indicators as detailed in the RAP or LRF, and complete the table below. Please provide the results of any other related monitoring carried out by the Company or its consultants and attach any additional information you think would be useful.

Have all the affected persons been fully compensated for their physical displacement and, if applicable, any economic losses resulting from the project?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If no, specify how many compensation payments are still outstanding (in terms of number and percentage of recipients and payment amounts) and state when these payments will be made:
Has the land acquisition had any additional, unforeseen impacts on affected persons' standard of living or access to livelihoods that were not previously covered in the RAP?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, quantify these impacts and specify what measures have been undertaken to minimize and mitigate these impacts. If no, specify how potential impacts on livelihoods have been monitored.
Have any vulnerable groups been identified?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, list the groups that were identified and describe any additional measures undertaken in order to mitigate impacts specific to these groups.

If applicable, have all transit allowances been paid?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If no, specify how many payments are still outstanding (in terms of number and percentage of recipients and payment amounts) and state when these payments will be made.
Has legal support been provided to all the affected persons?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, specify how many persons effectively made use of the legal support.
Have all outstanding land and/or resource claims been settled?	Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable <input type="checkbox"/>	If no, specify how many claims are still outstanding and state what the expected timing is for settling them.
Have there been any new land acquisition-related complaints or grievances?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state how many and summarize their content.
Has the company regularly reported to the affected communities on progress made in implementing the RAP?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state how many meetings were held and how many participants attended.
<p>New Land Acquisitions If the company acquired any new land for the project during the reporting year, please provide documents to show closure of land acquisition transactions. Please attach new/revised RAP covering the new land acquisition and describe mitigation measures, compensation, agreements reached, etc., and provide in tabular form a list of affected people and status of compensation.</p>		
Have any persons been physically displaced?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, how many?
Have any persons been economically displaced?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, how many?

Was it a government assisted resettlement?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
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9. Community Interaction and Development

Please summarise any social or community development initiatives undertaken by the company during the reporting period, and any associated expenditure:

Appendix 3 LEGISLATION

RELEVANT SERBIAN ENVIRONMENTAL LEGISLATION:

The main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection are listed below:

- ❖ Law on planning and construction ("Official Gazette of RS", Nos. 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019 and 9/2020);
- ❖ Law on nature protection ("Official Gazette of RS", Nos. 36/09, 88/10, 91/10, 14/16 and 95/2018);
- ❖ Law on environmental protection ("Official Gazette of RS", Nos. 135/04, 36/09, 72/09, 43/11, 14/16, 76/18 and 95/2018);
- ❖ Law on EIA ("Official Gazette of RS", Nos. 135/2004, 36/2009,);
- ❖ Law on Strategic EIA ("Official Gazette of RS", Nos. 135/2004, 88/10);
- ❖ Law on waste management ("Official Gazette of RS", Nos. 36/09, 88/10, 14/16 and 95/2018);
- ❖ Law on noise protection ("Official Gazette of RS", Nos. 36/09, 88/10);
- ❖ Law on water ("Official Gazette of RS", Nos. 30/10, 93/12, 101/16, 95/2018 and 95/2018);
- ❖ Law on forests ("Official Gazette of RS", Nos. 30/10, 93/12, 89/15 and 95/2018);
- ❖ Law on air protection ("Official Gazette of RS", Nos. 36/09, 10/13 and 26/2021);
- ❖ Law on safety and health at work ("Official Gazette of RS", Nos. 101/05, 91/15, 113/17).

Regulations established on the basis of the Law on EIA include the following:

- ❖ Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS", No. 114/08);
- ❖ Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of RS", No. 69/05);
- ❖ Rulebook on the contents of the EIA Study ("Official Gazette of RS", No. 69/05);
- ❖ Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study ("Official Gazette of RS", No. 69/05);
- ❖ Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of RS", No. 69/05);
- ❖ Regulations on permitted noise level in the environment ("Official Gazette of RS", No. 72/10);
- ❖ Decree on establishing class of water bodies ("Official Gazette of RS", No. 5/68);
- ❖ Decree on limit values of pollutants in surface and groundwater and sediment and deadlines for their reach ("Official Gazette of RS", No. 50/12)
- ❖ Regulations on dangers pollutants in waters ("Official Gazette of RS", No. 31/82).

Other relevant Serbian legislation

- ❖ Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area ("Official Gazette of RS", no. 38/09);
- ❖ Law on Roads ("Official Gazette of RS", no. 41/18 and 95/2018
- ❖ Regulation on prevention and containment of infectious disease COVID-19 ("Official Gazette of RS", Nos. 151/2020, 152/2020, 153/2020, 156/2020, 158/2020, 1/2021, 17/2021, 19/2021, 22/2021, 29/2021 и 34/2021).

Appendix 4 STAKEHOLDER ENGAGEMENT

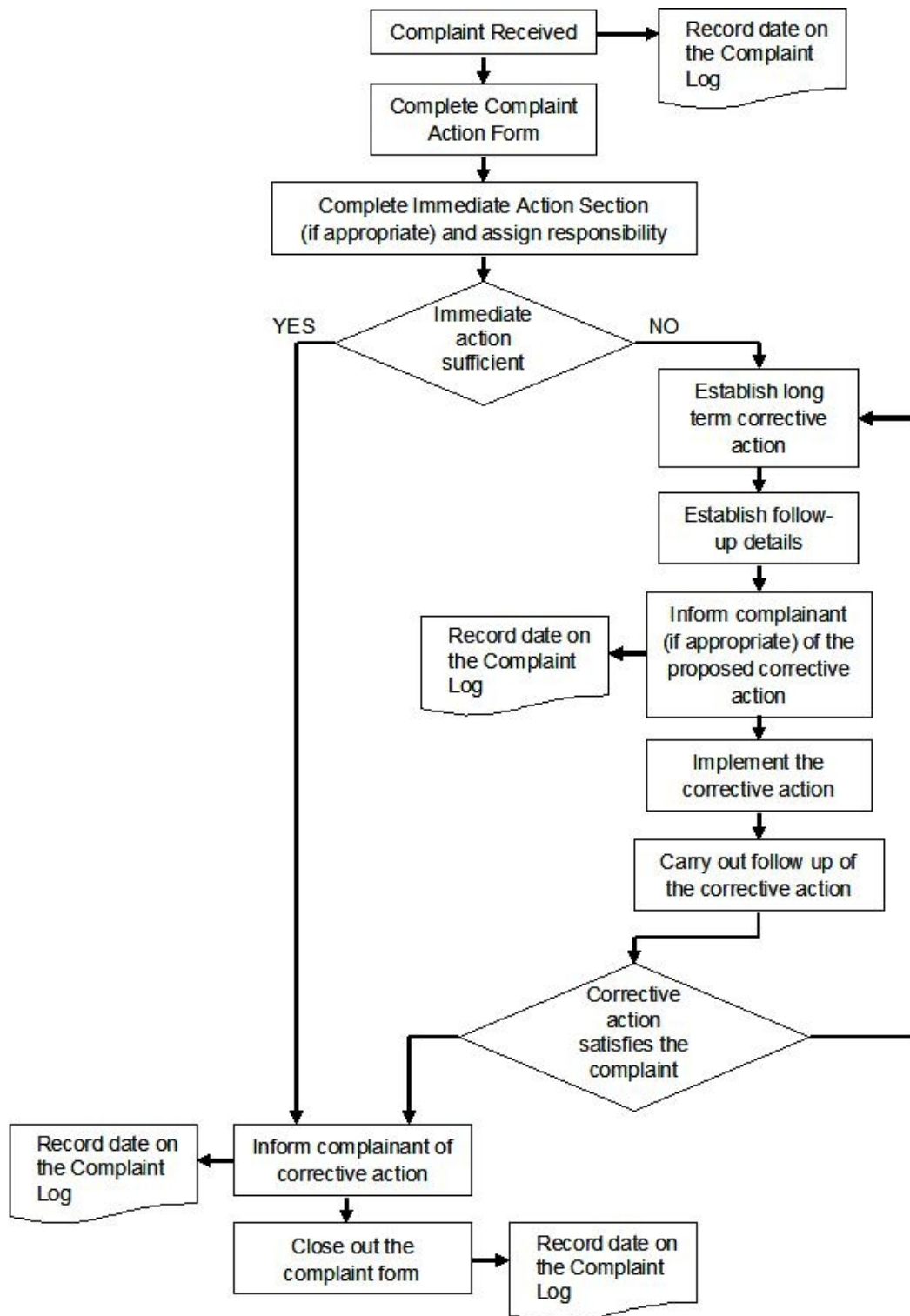
Identification of stakeholders

The stakeholders are people and organisations which may affect, be affected by, or believe to have been affected by a decision or activity. The stakeholders on this Project may be classified as follows:

1. Potentially affected parties:
 - ❖ PE “Roads of Serbia” employees and Contractors;
 - ❖ Representatives of companies directly bordering the Project;
 - ❖ Residents of areas in the Project Influence zone;
 - ❖ Local or regional authorities within the legal framework, such as: local land-owners and tenants and potentially affected industry and businesses.
2. Other interested parties:
 - ❖ Public;
 - ❖ Other companies operating in the National Network;
 - ❖ NGOs.

As the Project develops, more stakeholders may appear. Once it is identified, each stakeholder will be characterised as regards its interests, problems and requests and included in the list accordingly.

Grievance mechanism and form



Grievances are to be resolved within 15 working days.

Grievance reference number:			
Contact details	Name:		
	Address:		
	Tel:		
	e - mail:		
How would you prefer to be contacted? Please tick a box	by post	by phone	by e - mail
Name and personal information (JMBG from identity card).			
Details of your grievance. Please describe the problems, whom they occurred to, when, where and how many times, as relevant			
What is your proposal for resolving the grievance?			
How to submit this form to the authorised persons	by post:		
	by hand: please drop this form at:		
	by e - mail: Please e-mail your grievance, proposed resolution and contact details to the following e – mail address:		
Signature		Date	

REPORT ON PUBLIC CONSULTATION

1. BACKGROUND

Road Rehabilitation and Safety Project (RRSP) is a project of support of international financing institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to the Government of the Republic of Serbia in implementation of the National State Road Network Rehabilitation Program. This Project represents the implementation of the first phase of the Government's Program for the period 2014-2022 and covers the following:

- improvement of condition on state road network by means of rehabilitation of the existing roads,
- increase of road safety condition through appliance of measures for improvement of road safety in all phases of the Project implementation, and
- strengthening capacity and development of institutional coordination in the field of road and traffic safety through implementation of a number of various services.

The Republic of Serbia intends to invest part of this loan in preparation of technical documentation for heavy maintenance of the state road IB, No. 15, section: section Sombor (Industrial zone) - Kula, chainage: km 24+251 - km 63+696, length: 39,535 km.

This Environmental Management Plan (EMP) has been prepared for heavy maintenance of subject road section, to ensure application of the good environmental practice and document compliance with the requirements of international financial institutions which are going to finance projects of road rehabilitation and safety in Serbia. Making of the EMP was carried out through study and research in the field, including consultations with representatives at regional and local level.

Company PROJECT BIRO UTIBER Ltd., as a Lead Partner in a Joint Venture PROJECT BIRO UTIBER & UTIBER KOZUTE BERUHAZO KFT. & SAPUTNIK-M Ltd. & GEOMEHANIKA Ltd. that makes the subject technical documentation, made the draft of the EMP. According to the predefined procedure, the draft EMP was delivered to the experts appointed by the Investor, in order to acquire their approval.

On April 28th 2021, PE "Roads of Serbia" gave the consent for the draft EMP and approved the start of public consultation process, as well as preparation for public presentation. PE "Roads of Serbia" started public consultations and on June 9th 2021 issued a call for a public discussion in newspaper "Politika", as well as on official website of the company www.putevi-srbije.rs. The call was also published on official website of the City of Sombor and on the local portal www.tvsombor.com".

Public auditorium, organizations and other interested parties are invited to participate in the public debate on the draft document Environmental Management Plan. Before its advertising in newspapers, EMP was submitted to the City of Sombor, Municipality of Kula and PE "Roads of Serbia".

Access to a document is provided at the following addresses:

- the premises of the PE "Roads of Serbia", investment sector, 19a Vojkovićeve St., Belgrade, on the first floor, on working days from 11:00 AM to 1:00 PM (local time), within 15 days in regards to the date of public announcement of this invitation.
- within the premises of the City Administration of City of Sombor, Cara Uroša Square 1, Office No. 50, on working days from 10:00 AM to 12:00 AM (local time), within 15 days from the date of publication of this invitation.
- within the premises of the Municipality of Kula, street Lenjinova 1, Office No. 405, on working days from 10:00 AM to 12:00 AM (local time), within 15 days from the date of publication of this invitation.
- on the web site of the City of Sombor: www.sombor.rs
- on the web site of the municipality of Kula: www.kula.com
- on PE "Roads of Serbia" web site: www.putevi-srbije.rs

Public discussion and presentation of the Environmental Management Plan was held in the Big hall of the assembly of the City of Sombor on June 21st 2021.

2. REPORT ON PUBLIC CONSULTATION

The public presentation was attended by 11 participants, among others, representatives of the City of Sombor and Municipality of Kula, as well as representatives of the Designer "Project biro Utiber" Mr. Boris Rakovic MSc in Civil Engineering, designer of the subject road section and Mr. Mirko Jevtic, MSc in Environmental Engineering, the author of the Environmental Management Plan.

The presentation began, as planned at 10.00 AM. Mr. Jevtic presented in detail the EMP to the participants. During the public presentation, there were no complaints regarding the EMP, nor there were opinions or remarks filled during the public consultation period.

At the end of the presentation a discussion on several topics was conducted:

1. Mr Dejan Aleksic, representative of the municipality of Kula talked about the negative experience with dumping of construction material at inadequate location by the Contractor in Kula, when the pile of material stop the water flowing from a nearby stream, which was used by wild animals. Consequently local hunters had to perform relocation of impacted wild animals.

Answer: Mr Mirko Jevtic stated that the Contractor shall perform detailed analysis of possible adverse impacts of materials dump site.

2. Mr Vladimir Katanic, Head of the Sector for agriculture and environment in the City of Sombor pointed out that there is a problem of water overflow at parcels no. 3905, 3906, 3894 and 3895 CM Telecka and the fact that on several occasions, after heavy rain there was a damage recorded on agricultural crops at these locations. He also added that a suggestion of technical solution for water drainage from parcels no. 3904, 3905, 3907 and others was made by water management company "West Backa" Sombor, which can not be performed without the consent of the owners to give their property for the construction of a drainage canal. Finally he stated that an optimal solution to this problem should be found.

Answer: Parcels of concern are located 400-800 m from the state road IB-15 which is the subject of heavy maintenance, i.e. these parcels are not directly connected to the road land (not adjacent to road). Therefore, the Designer is not sure in what manner the problem of water drainage from these parcels could be solved in this stage of documentation development. The Designer will provide the technical solution for surface water drainage from the road corridor, which may affect safe traffic and state road construction, but solution for surface water drainage from areas that are not adjacent to the state road is not the scope of this project. If the City of Sombor would provide technical solution for water drainage for these parcels, which may influence the water drainage system of the road and the Investor would agree with this solution, the Designer may implement this solution into the design documentation .

3. Mr Katanic has also pointed out that there is a mistake in the document, I.e. in one part the text states that the drainage system is in a bad condition, and in the other that it is in a solid state. This correction should be made.

Answer: As already said during the presentation, the Designer will amend this mistake in the final EMP. The Designer's opinion is that the existing drainage system is in solid state.

The public presentation ended at 12.00 AM local time.



Picture 1: Public consultations in Sombor, June 21th 2021



Picture 2: Public consultations in Sombor, June 21th 2021

4. DOCUMENTATION



In accordance with the WB Operational Policies (OP 4.01)
Public Enterprise "Roads of Serbia"
issues an invitation for
PUBLIC CONSULTATIONS
for the public, bodies and organizations interested in
ENVIRONMENTAL MANAGEMENT PLAN (EMP)
for heavy maintenance (road rehabilitation –
upgrading) of the State Road IB No. 15 section:
SOMBOR (INDUSTRIAL ZONE)–KULA

Interested parties can get an insight into the EMP document on following addresses:

- the premises of the PE "Roads of Serbia", investment sector, 19a Vojkovičeva St., Belgrade, on the first floor, on working days from 11:00 AM to 1:00 PM (local time), within 15 days in regards to the date of public announcement of this invitation.
- within the premises of the City Administration of City of Sombor, Cara Urosa Square 1, Office No. 50, on working days from 10:00 AM to 12:00 AM (local time), within 15 days from the date of publication of this invitation.
- within the premises of the Municipality of Kula, street Lenjinova 1, Office No. 405, on working days from 10:00 AM to 12:00 AM (local time), within 15 days from the date of publication of this invitation.
- on the web site of the City of Sombor: www.sombor.rs
- on the web site of the municipality of Kula: www.kula.com
- on PE "Roads of Serbia" web site: www.putevi-srbije.rs

Remarks and suggestions in regards to the EMP document shall be submitted in written form to the PE "Roads of Serbia", Sector for investments, 19a Vojkovičeva St., Belgrade. Remarks can be also provided on following internet address: office@putevi-srbije.rs

On June 21, 2021, at 10:00 AM (local time), public consultations and presentation of the subject EMP document will be organized within the Big Hall of the City of Sombor, Cara Urosa Square 1.

If you need any additional information, please contact:
PE "Roads of Serbia"
Sector for investments
19a Vojkovičeva Street
11000 Belgrade, Serbia
tel./fax. +381 11 / 32 06 813
E-mail: igor.radovic@putevi-srbije.rs

12104963-2


Picture. 3: Announcement of public consultation in daily newspaper "Politika"

Road Rehabilitation and Safety Project

- ENVIRONMENTAL MANAGEMENT PLAN
- ENVIRONMENT PROTECTION PLAN
- ROAD REHABILITATION AND SAFETY PROJECT
- SOCIAL IMPACT MANAGEMENT


- Call for Public Consultations: EMP for heavy maintenance of State Road IB Class No. 21 section: Ivanjica-Sjenica
- Environmental Management Plan – EMP for for heavy maintenance of State Road IB Class No. 21 section: Ivanjica-Sjenica
- Call for Public Consultations: EMP for heavy maintenance of State Road IB Class No. 15 section: Sombor-Kula
- Environmental Management Plan – EMP for for heavy maintenance of State Road IB Class No. 15 section: Sombor-Kula
- Call for Public Consultations: EMP for heavy maintenance of State Road IB Class No. 33 section: Pozarevac(Orljevo)-Ljesnica
- Environmental Management Plan – EMP for for heavy maintenance of State Road IB Class No. 33 section: Pozarevac(Orljevo)-Ljesnica
- Call for Public Consultations: EMP for heavy maintenance of State Road IB Class No. 34 section: Bratinac - Branicevo
- Environmental Management Plan – EMP for for heavy maintenance of State Road IB Class No. 34 section: Bratinac - Branicevo

Picture. 4: Announcement of public consultation on PE "Roads of Serbia" website





[О СОМБОРУ](#)
[ЛОКАЛНА САМОУПРАВА](#)
[ГРАДСКА УПРАВА](#)
[ДОКУМЕНТИ](#)
[АКТУЕЛНОСТИ](#)
[ПРИВРЕДА](#)
[УСЛУГЕ](#)
[ИНВЕСТИРАЈТЕ У СОМБОР](#)
[КОНТАКТ](#)

У ТОКУ ЈАВНИ УВИД У ПЛАН УПРАВЉАЊА ЗАШТИТОМ ЖИВОТНЕ СРЕДИНЕ ЗА ПРОЈЕКАТ ПОЈАЧАНОГ ОДРЖАВАЊА ДРЖАВНОГ ПУТА СОМБОР – КУЛА

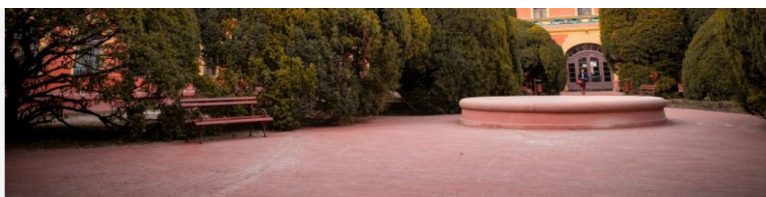


Подели: [f](#) [t](#) [l](#)

Остале вести:

- 
 МУЛТИКУЛТИ СОМБОР 2021*
ОДЛУЧЕЊО МНОГОБОЈНЕ
ПОСЕТИОЦЕ
[Опширније >](#)
- 
 РИЗИКО УПОЗОРАВА НА ВИСОКУ
ТЕМПЕРАТУРУ И ЛОКАЛНУ ПОЈАВУ
ГРМЉАВИНА
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Picture. 5: Announcement of public consultation on City of Sombor website



DRUŠTVO

U toku Javni uvid u plan projekta pojačanog održavanja državnog puta Sombor – Kula

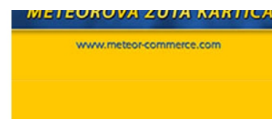
7. juna 2021. / Redakcija

Javno preduzeće „Putevi Srbije“ poziva javnost, organe i zainteresovane organizacije da se uključe u javne konsultacije o Planu upravljanja zaštitom životne sredine za projekat pojačanog održavanja državnog puta IB reda br. 15 deonica: Sombor – Kula.

Uvid u Plan upravljanja zaštitom životne sredine u Somboru može se izvršiti u prostorijama Gradske uprave grada Sombora, kancelarija br.50 svakog radnog dana od 10 do 12 časovam-zivotne-sredine-za-projekat-pojacanog-odrzavanja-drzavnog-reda/

Primedbe i mišljenja u vezi sa Planom upravljanja zaštitom životne sredine se podnose u pisanom obliku i dostavljaju na adresu JP „Putevi Srbije“, Sektor za investicije, Vojkovićevo 19a, Beograd, ili elektronskom poštom na adresu office@putevi-srbije.rs

Javne konsultacije i prezentacija predmetnog Plana održaće se 21. juna, sa početkom u 10:00 časova u Velkoj skupštinskoj sali grada Sombora.



Skorašnji članci

Održana 46. sednica Gradskog veća Grada Sombora

(VIDEO) Krenula treća tranša prehrambenih paketa za socijalno ugrožena lica

Za četvrtak zakazana akcija dobrovoljnog davanja krvi

U toku redovno orezivanje uličnih drvoreda u Somboru

(VIDEO) Koncert Zorane Iduški u sklopu manifestacije „Ulica starih zanata“

Skorašnji komentari

Poslednje objave

DRUŠTVO

Picture. 6: Announcement of public consultation on TV Sombor's website

Appendix 5 CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS



Покрајински завод за заштиту природе, Нови Сад, ул. Радничка бр. 20а (у даљем тексту: Завод), на основу чл. 9. Закона о заштити природе („Службени гласник РС“, бр. 36/2009, 88/2010, 91/2010–исправка, 14/2016 и 95/2018 - други закон, у даљем тексту: Закон), а у вези са чл. 136. Закона о општем управном поступку („Службени гласник РС“, бр. 18/2016 и 95/2018 - аутентично тумачење), поступајући по захтеву бр. ДО 19/21-19 од 19.01.2021. године, „Project Biro Utiber“ ДОО, Темеринска 76, 21000 Нови Сад, за издавање услова заштите природе за израду Главног пројекта појачаног одржавања државних путева ИВ 15 и ИВ 21, LOT 1: ИВ15, деоница Сомбор-Кула, L=39.535 km дана 19.02.2021. године под 03 бр. 019-107/2, доноси

РЕШЕЊЕ

о условима заштите природе

1. Траса пута на којем се планира појачано одржавање пролази преко аграрног подручја, пресецајући трасе мелиоративних канала које представљају коридоре кретања дивљих врста између регистрованих станишта строго заштићених и заштићених врста (Правилник о проглашењу и заштити строго заштићених и заштићених дивљих врста биљака, животиња и гљива, „Службени гласник РС“, бр. 5/10, 47/11, 32/16 и 98/16) нарочито између SOM04а, SOM04б, SOM04с, SOM04ф KUL02, KUL03, KUL04а, KUL04б, KUL04ф, KUL08, KUL09, KUL10, односно између наведених станишта и издвојених еколошких коридора. Траса пресеца локалне еколошке коридоре утврђене Просторним планом града Сомбора („Сл. лист Града Сомбора“, бр.05/2014), а источни део трасе се пружа у близини канала Врбас-Бездан који је регионални еколошки коридор, утврђен Регионалним просторним планом АП Војводине ("Сл. лист АПВ", бр. 22/11). Сходно томе, издају се следећи услови заштите природе:

1) Планирање пројекта појачаног одржавања: поправке и проширење коловоза, поправке геометрије и коловоза постојећих аутобуских стајалишта и раскрсница, санацију мостова, уређење прикључака атарских путева, регулација водотокова у зони путева, чишћење и санацију постојећих пропуста и потпорних зидова, унапређење система одводњавања пута и одвођење воде до реципијента, изградњу/реконструкцију тротоара и бицикличких стаза у зонама насељених места, поправке и уређење саобраћајне сигнализације, могуће је вршити унутар постојеће трасе државних путева ИВ 15 и ИВ 21, LOT 1: ИВ15, на деоници од Сомбора до Куле, у дужини од 39.535 km, односно на ширем простору у складу са потребама очувања природних ресурса и вредности.

2) Планирање објекта и организацију радова усагласити са потребама очувања еколошког интегритета и природних вредности подручја:

2.1. Забрањено је отварање позајмишта, одлагање отпадног материјала, постављање било каквих привремених објеката/материјала за потребе радова, као и паркирање или сервисирање механизације и претакање горива на површинама заштићених подручја, еколошких коридора, регистрованих станишта строго заштићених и заштићених врста, као и у зони непосредног хидролошког утицаја (200 m) на њих.

Просторне целине значајне за очување биодиверзитета ширег подручја су назначене на Прилозима 1 а и б;

2.2. Ради заштите хидролошког режима, у појасу до 500 метара од станишта строго заштићених и заштићених врста експлоатација земље и песка може да се одвија искључиво изнад нивоа фреатске издани.

3) За очување еколошких својстава водотокова као станишта, еколошких коридора и коридора кретања дивљих врста:

3.1. Водотоци и канали са улогом еколошких коридора не могу да служе као пријемници непречишћених/недовољно пречишћених отпадних вода;

3.2. У највећој могућој мери очувати морфологију приобаља и обалног појаса. На деоницама где не постоје алтернативна решења и неопходно је извршити регулацију водотока/канала, обезбедити појасеве по косинама корита и на обалама који су проходни за животиње (избегавањем формирања вертикалних површина – степеништа и већих вештачких површина, односно наношењем слоја земљишта на вештачке површине где за то постоји могућност итд.) и по могућности су покривени травном вегетацијом;

3.3. Није дозвољено зацевљење водотока/канала који су наведени као путања/коридори животиња средњих димензија. Зацевљење канала-коридора који претежно служе за кретање животиња малих димензија (наведени тачком 2.1.) је дозвољено формирањем мултифункционалних пропуста који омогућују безбедно кретање ситних животиња, односно изградњом наменских пролаза за животиње;

3.4. Приликом обављања планираних радова очувати постојећи приобални појас травне вегетације канала, који чини саставни део еколошког коридора.

4) Ради смањења акцидената узрокованих сударом са дивљачи и угинућа животиња на путу применити следеће мере очувања, односно побољшања проходности локалних коридора кретања дивљих врста код мостова/пропуста мелиоративних канала чија се траса укршта са предметни путем:

4.1. Побољшати услове за безбедан пролаз животиња малих телесних димензија (водоземци, ситни сисари) на следећим локацијама:

- канал близу стационоаже km 40+350;
- први мост или пропуст од стационоаже km 43+700 према Сивцу;
- канал близу стационоаже km 47+000;
- канал близу стационоаже km 55+050;
- канал близу стационоаже km 55+700;
- канал близу стационоаже km 55+900;

4.2. Омогућити безбедан пролаз животињама средњих телесних димензија (нпр. јазавац) код канала близу стационоаже km 35+730 и на km 63+696;

4.3. Приликом чишћења/санације мостова и пропуста унапредити стање постојећих површина за кретање животиња (остаји оригиналне обале и сл.), доградњом или моделирањем терена код крајева и у унутрашњости пропуста/мостова током измуљивања. Потребно је очувати, односно успоставити континуитет хоризонталних површина уз зидове пропуста/мостова које се надовезују са једне стране на обални појас канала или водотока ван трасе пута, а са друге стране на постојеће/формиране хоризонталне површине (терасе) у склопу пролаза за животиње (Прилог 2). Хоризонталне површине за кретање животиња треба да се налазе изнад нивоа воде

код средњег водостаја. Моделирањем терена испред свих пропуста/мостова побољшати осветљеност унутрашњег простора;

4.4. Приликом обнове мостова или пропуста, обновљени објекти треба да омогућују безбедно кретање дивљих врста, што може да се постиже на два начина: формирањем мултифункционалних пропуста који омогућују безбедно кретање животиња или изградњом специјалних пролаза за животиње који испуњавају захтеве утврђене Законом и Правилником о специјалним техничко-технолошким решењима која омогућавају несметану и сигурну комуникацију дивљих животиња ("Службени гласник РС", број 72/10);

4.5. Спречити доспевање водоземаца и других ситних животиња на пут трајном вертикалном баријером глатке површине, са горњим рубом за отежавање кретања малих животиња, висине 0,5 m (Прилог 2 а) у дужини од најмање 40 m уз пут са обе стране водотока/канала наведених под тачкама 4.1. и 4.2, као и на другим локалитетима на којима процена утицаја доказује повећану фреквенцу кретања водоземаца или других заштићених и строго заштићених врста малих димензија. Баријере поставити тако да усмеравају кретање јединки према унутрашњости пролаза за животиње;

4.6. Код свих хидротехничких објеката који представљају баријере или замке за животиње које се крећу коритом или обалом (нпр. стрме вештачке површине, шахтови вертикалних зидова) као и по отвореним каналима поред саобраћајница, треба обезбедити техничка решења (нпр. одговарајући нагиб, хрпаве површине, хоризонтални ровови) која обезбеђују безбедно кретање малим животињама унутар корита, односно омогућују излазак из корита или објеката.

5) Функционалну повезаност станишта и проходност коридора кретања животиња који се пресецају саобраћајницом, обезбедити применом техничких решења која обезбеђују проходност косине корита и обале испод постојећих и планираних мостова/пропуста (Прилог 3):

5.1. За животиње малих и средњих димензија унутар мултифункционалних мостова/пропуста обезбедити проходност обале формирањем хоризонталне површине изнад нивоа средњег водостаја са обе стране канала. Минимална ширина трака за кретање животиња треба да буде 1 m, минимална ширина слободног простора унутрашњости пролаза 6 m (оптимална ширина је једнака или већа од 9 m), минимална висина унутрашњег простора 2 m. У случају изградње специјалних пролаза, они морају бити постављени са обе стране канала, повезани са косином и обалним појасом канала, а њихова минимална димензија 1x1 m;

5.2. За животиње малих димензија обезбедити са обе стране канала хоризонталну површину минималне ширине 0,4 m (оптимално 0,8 m), а минималне висине унутрашњег простора 1 m (оптимално већа од 1,5 m). У случају изградње специјалних пролаза, они морају бити постављени са обе стране канала, повезани са косином и обалним појасом канала, а њихова минимална димензија 1x2 m;

5.3. Саму стазу за кретање животиња обложити природним типом земљишта обале водотока (Прилози 2 б, в). Траке за кретање животиња повезати са обалом канала ван моста или пропуста на начин да то омогућује безбедно кретање и малим, слабо покретљивим врстама (избегавањем формирања вертикалних површина – степеништа и већих вештачких површина, односно наношењем слоја земљишта на вештачке површине где за то постоји могућност итд.);

5.4. Вештачке површине косине корита и обале унутар пролаза треба да буду грубо храпаве (могуће решење су хоризонтална ребра или урези), што ће спречавати да животиње упадну у воду и олакшаће им излаз из воде (Прилог 2 б);

5.5. Моделирањем терена испред и иза пролаза или мултифункционалног пропуста обезбедити да морфологија канала/водотока не смањује осветљеност пролаза и ствара повољни визуелни ефект за животиње, а омогућује и одржавање вегетације испред пролаза кошењем;

5.6. Функционалност пролаза за животиње обезбедити редовним одржавањем.

б) Поред уважавања правила дефинисаних постојећим просторно-планским документима, посебно обратити пажњу на смањење негативних утицаја на квалитет животне средине подручја:

6.1. Водити рачуна о заштити воде, ваздуха и земљишта. У случају акцидентног изливања опасних материја (гориво, машинска и друга уља, боје, разређивачи и сл.), загађени слој земљишта мора се отклонити и исти ставити у амбалажу која се може празнити на локацији коју утврди надлежна комунална служба;

6.2. У складу са чланом 97. Закона о водама ("Сл. гласник РС" бр. 30/10, 93/12, 101/16, 95/18 и 95/18 - др. закон), забрањено је испуштање непречишћених отпадних вода у крајњи реципијент. У случају прикупљања зауљених отпадних атмосферских вода системом непропусних дренажних цеви/канала неопходно је њихово пречишћавање на сепаратору уља и масти. Све отпадне воде, укључујући процедурне воде са саобраћајнице или воде са садржајем токсичних и запаљивих течности, морају бити третиране у складу са правилима одвођења и пречишћавања отпадних вода и према захтевима Уредбе о граничним вредностима емисије загађујућих материја у воде и роковима за њихово достизање („Сл. гласник РС“, бр. 67/11, 48/12 и 1/16), односно квалитет пречишћеног ефлуента мора задовољавати прописане критеријуме за упуштање у крајњи реципијент;

6.3. Мазиво и гориво потребно за снабдевање механизације неопходно је транспортовати, депоновати (чувати) и њима руковати поштујући при том мере заштите прописане законском регулативом која се односи на опасне материје;

6.4. Предвидети обавезу сакупљања комуналног отпада, током радова, у одговарајуће посуде, или на други одговарајући начин и обезбедити њихову редовну евакуацију на одговарајућу депонију;

6.5. У случају коришћења уклоњеног путног материјала као секундарне сировине, односно рециклираног асфалта за одржавање путева и изградњу нових саобраћајница, управљање отпадом обављати према одредбама Правилника о условима и начину сакупљања, транспорта, складиштења и третмана отпада који се користи као секундарна сировина или за добијање енергије („Сл. гласник РС", бр. 98/2010) и сродних законских аката.

7) Уколико се у току радова наиђе на геолошка или палеонтолошка документа (фосили, минерали, кристали и др.) која би могла представљати заштићену природну вредност, налазач је дужан да пријави Министарству заштите животне средине, у року од осам дана од дана проналаска и предузме мере заштите од уништења, оштећивања или крађе до доласка овлашћеног лица.

8) О почетку извођења предметних активности обавестити овај Завод, у циљу обезбеђивања стручног надзора.

2. Ово Решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.

3. За све друге радове/активности на предметном подручју потребно је Заводу поднети нов захтев за издавање услова заштите природе.
4. Уколико подносилац захтева у року од две године од дана достављања овог Решења не отпочне радове и активности за које је ово Решење о условима заштите природе издато, дужан је да од Завода прибави ново решење о условима.
5. Такса за издавање Решења у износу од 30 000,00 динара одређена је у складу са чланом 2. став 5. тачка 1. Правилника о висини и начину обрачуна и наплате таксе за издавање акта о условима заштите природе („Службени гласник РС“, бр. 73/2011, 106/2013)

Образложење

Покрајински завод за заштиту природе је примио дана 21.01.2021. године захтев заведен под 03 бр. 019-107, ЈП „Путеви Србије“ кога заступа „Project Biro Utiber“ ДОО, Темеринска 76, 21000 Нови Сад, за издавање услова заштите природе за израду Главног пројекта појачаног одржавања државних путева ИВ 15 и ИВ 21, LOT 1: ИВ15, деоница Сомбор-Кула, L=39.535 km. Уз захтев је приложена карта трасе предметне деонице. Допуном података електронском поштом примљеног 18.02.2021. набрајани су и планирани радови одржавања.

Одредбом члана 102. и члана 103. Закона („Сл. гласник РС“, бр. 36/2009, 88/2010 и 91/2010), одређено је да организација за заштиту природе, тј. Покрајински завод за заштиту природе утврђује услове заштите и даје податке о заштићеним природним добрима у поступку израде просторних и других планова, односно основа (шумских, водопривредних, ловних, риболовних и др.) и друге инвестиционо-техничке документације.

На основу достављеног захтева и пратеће документације подносиоца захтева, утврђено је да одржавање државних путева ИВ 15 и ИВ 21, LOT 1: ИВ15, деоница Сомбор-Кула, L=39.535 km, као мера одржавања постојеће инфраструктуре може да се одвија на простору дефинисаној у тачки 1. подтачка 1) Решења.

Предвиђене су поправке оштећења или замена оштећених слојева коловозне конструкције, проширење коловоза максимално до 1 m, поправку геометрије и коловоза постојећих аутобуских стајалишта и раскрсница, санацију мостова, уређење атарских путева који се прикључују на државни пут у дужини до 40 m, регулација водотокова у зони путева, чишћење и санацију постојећих пропуста и потпорних зидова, унапређење система одводњавања пута и одвођење воде до реципијента, изградњу/реконструкцију тротоара и бицикличких стаза у зонама насељених места, поправке и уређење саобраћајне сигнализације и опреме на државном путу,

Увидом у Покрајински регистар заштићених природних добара и документацију Завода, а у складу са прописима који регулишу област заштите природе, утврђени су услови заштите природе из диспозитива овог решења.

Траса пута прелази преко мелиоративних канала које представљају коридоре кретања дивљих врста између регистрованих станишта строго заштићених и заштићених врста издвојених у складу са Правилником о проглашењу и заштити строго заштићених и заштићених дивљих врста биљака, животиња и гљива („Службени гласник РС“, бр. 5/10, 47/11, 32/16 и 98/16), односно између станишта и издвојених еколошких коридора.

- Слатине код Кљајићева (код SOM04) су регистрована станишта врстама слатина и влажних станишта. На субјединицама SOM04a, SOM04b и SOM04c су регистроване врсте: сива ветрушка (*Falco vespertinus*), сиви сврачак (*Lanius minor*), жута плиска (*Motacilla flava*), велика стрнадица (*Emberiza calandra*); а SOM04c садржи и заштићену траву (*Crypsis aculeata*) и популацију жабље траве (*Senecio doria*). Субјединица SOM04 f поред слатинских биљака као што су панонски звездан (*Tripolium pannonicum* *supsp. pannonicum*) и слатинска гроница (*Lepidium cartilagineum*), богат је птичјим врстама од којих су најзначајнији обична и сива ветрушка (*Falco tinnunculus*, *F. vespertinus*), руси и сиви сврачак (*Lanius collurio*, *L. minor*), жута плиска (*Motacilla flava*), велика стрнадица (*Emberiza calandra*), а присутне су и врсте влажних станишта: барска корњач (*Emys orbicularis*) и обичном мрмољку (*Triturus vulgaris*).
- Колектори отпадних вода код Црвенке (код KUL02) су станишта птицама међу којима су и црвенонога властелица (*Himantopus himantopus*), сабљарка (*Recurvirostra avosetta*), црвеноноги спрудник (*Tringa totanus*), црноглави галеб (*Larus melanocephalus*), обична чигра (*Sterna hirundo*) и обична грмуша (*Sylvia communis*), али као влажна станишта привлаче и водоземце чије је присуство утврђено на околним природним стаништима.
- Долина код Телечке (код KUL03) је станиште степским и шумостепским врстама: кантарион (*Hypericum elegans*), степски гуштер (*Podarcis taurica*) и руси сврачак (*Lanius collurio*).
- Падине Телечке са сурдудима (кодови KUL04a, KUL04b, KUL04f) су остаци степских станишта на којима живи памук трава (*Salvia austriaca*) и степски гуштер (*Podarcis taurica*).
- Северни део долине североисточно од Куле (код KUL08) представљају станиште степским биљкама (кантарион (*Hypericum elegans*) и пиревина (*Agropyron cristatum* *supsp. cristatum*)) и гмизавцима, као што су зелембаћ (*Lacerta agilis*), зидни гуштер (*Podarcis muralis*), степски гуштер (*P. taurica*)
- Остаци степа код Црвенке (код KUL09) је станиште следећим врстама: ластин репак (*Papilion machaon*), руси сврачак (*Lanius collurio*), обична грмуша (*Sylvia communis*), голуб гриваш (*Columba palumbus*)
- Долина код Нове Црвенке (код KUL10), где су регистроване следеће врсте: текуница (*Spermophilus citellus*), срноглава траварка (*Saxicola torquatus*), кос (*Turdus merula*), црноглава и обична грмуша (*Sylvia atricapilla*, *S. communis*) и руси сврачак (*Lanius collurio*).

Траса пролази преко мелиоративног канала западно од Кљајићева близу станице km 35+730 и утиче на проходност канала источно од Кљајићева близу станице km 40+350 који су издвојени као локални еколошки коридори Просторним планом града Сомбора („Сл. лист Града Сомбора“ бр.05/2014). Источни део трасе се пружа у близини канала Врбас-Бездан који је регионални еколошки коридор, утврђен Регионалним просторним планом АП Војводине ("Сл. лист АПВ", бр. 22/11).

Безбедно кретање дивљих врста преко трасе предметног пута пута може да се обезбеди адаптацијама постојећих и планираних пропуста и мостова или применом посебних техничких решења утврђених Правилником о специјалним техничко-технолошким решењима која омогућавају несметану и сигурну комуникацију дивљих животиња ("Сл. гласник РС", број 72/10). Већи број слабо покретљивих врста предметног простора (*Emys orbicularis*, *Podarcis muralis*, *P. taurica*, *Lacerta agilis*, *Spermophilus citellus*) се налази на списковима Конвенције о очувању европске дивље флоре и фауне и природних станишта ("Службени гласник РС - Међународни уговори", бр. 102/2007

од 7.11.2007. године), који чланом 4. указује на обавезу да се посвети посебна пажња заштити области које су од значаја за миграторне врсте наведене у Додацима II и III.

Услови прописани тачкама 1.- 8. израђени су у складу са чланом 21. Закона о заштити животне средине („Сл. гласник РС“, бр. 135/04, 36/2009 - други закон, 72/2009 – други закон, 43/2011 одлука – УС, 14/2016, 76/2018 и 95/2018-други закон) којим је дефинисан принцип интегрисане заштите природе и животне средине: „Заштита природних вредности остварује се спровођењем мера за очување њиховог квалитета, количина и резерви, као и природних процеса, односно њихове међузависности и природне равнотеже у целини“. Очување природних процеса и заштита природних вредности у антропогеном пределу захтева исте мере које су предуслов стварања здраве животне средине, а право на здраву средину обезбеђено је Уставом Републике Србије.

Услови из овог Решења су дефинисани у складу са чланом 7. став 3), 4), 5) и 7) Закона, по коме се заштита природе реализује „... спровођењем мера заштите природе и предела; утврђивањем услова и мера заштите природе и заштићених природних добара и предела у просторним и урбанистичким плановима, пројектној документацији, основама и програмима...од утицаја на природу...као и ублажавањем штетних последица које су настале активностима у природи“.

Чланом 8. Закона дефинисано је планирање, уређење и коришћење простора. Планирање и уређење простора спроводи се на основу просторних и урбанистичких планова, планске и пројектне документације, у складу са мерама и условима заштите природе. Носилац пројекта дужан је да поступа у складу са мерама заштите природе, на начин да се избегну, или сведу на најмању меру угрожавања или оштећења природе. Према члану 9. у поступку израде планова, пројеката и активности из члана 8. Закона прибављају се услови заштите природе. Акт о условима заштите природе, између осталог, садржи процену да ли се планирани радови и активности могу реализовати са становишта циљева заштите природе.

Законски основ за доношење решења:

Закон о заштити природе („Сл. гласник РС“, бр. 36/2009, 88/2010, 91/2010 - испр., 14/2016 и 95/2018 - други закон); Закон о заштити животне средине („Сл. гласник РС“, бр. 135/04, 36/2009 - други закон, 72/2009 – други закон, 43/2011 одлука – УС, 14/2016, 76/2018 и 95/2018-други закон), Закон о потврђивању Конвенције о очувању европске дивље флоре и фауне и природних станишта ("Сл. гласник РС - Међународни уговори", бр. 102/2007), Закон о водама ("Сл. гласник РС" бр. 30/10, 93/12, 101/16, 95/18 и 95/18 - др. закон), Уредба о граничним вредностима емисије загађујућих материја у воде и роковима за њихово достизање („Сл. гласник РС“, бр. 67/11, 48/12 и 1/16); Правилник о специјалним техничко-технолошким решењима која омогућавају несметану и сигурну комуникацију дивљих животиња ("Службени гласник РС", број 72/10); Правилник о условима и начину сакупљања, транспорта, складиштења и третмана отпада који се користи као секундарна сировина или за добијање енергије („Сл. гласник РС", бр. 98/2010); Регионални просторни план АП Војводине ("Сл. лист АПВ", бр. 22/11); Просторни план града Сомбора („Сл. лист Града Сомбора“ бр. 05/2014).

Предметне активности се могу реализовати под условима дефинисаним овим Решењем, јер је процењено да ће позитивно утицати на природне вредности подручја.

На основу свега наведеног, одлучено је као у диспозитиву овог Решења.

Упутство о правном средству: Против овог Решења може се поднети жалба Покрајинском секретаријату за урбанизам и заштиту животне средине, а преко Покрајинског завода за заштиту природе, у року од 15 дана од дана достављања овог Решења, уз доказ о уплати Републичке административне таксе у износу од 480,00 динара на текући рачун бр. 840-742221843-57, позив на број 59013 по моделу 97.

Прилози:

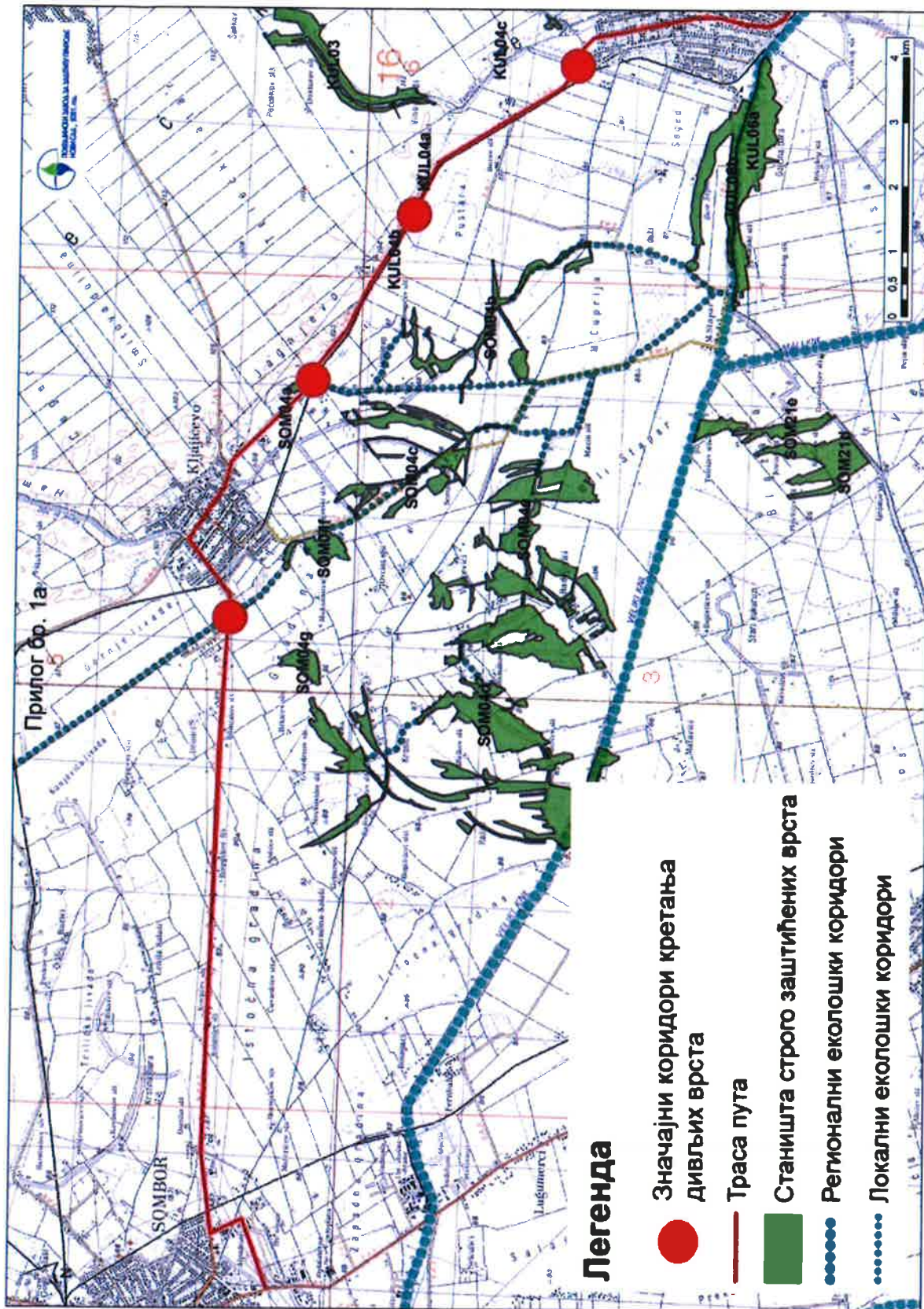
1. а,б Станишта строго заштићених и заштићених врста, еколошки коридори и канали значајни за кретање дивљих врста
2. Техничка решења за заштиту дивљих врста



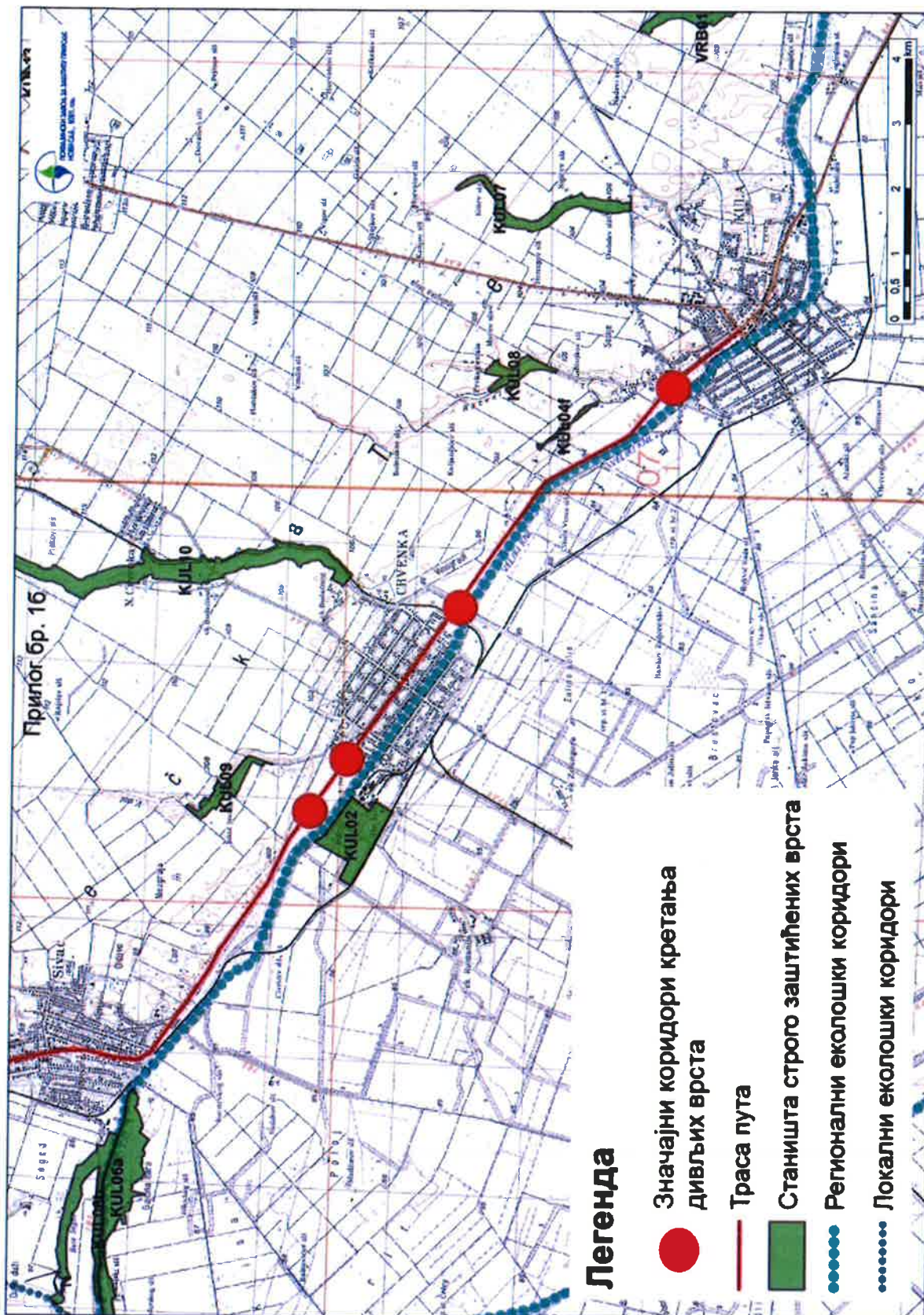
Достављено:

- Подносиоцу захтева
- Покрајинском секретаријату за урбанизам и заштиту животне средине – сектор за инспекцијске послове
- Архиви

Прилог 1.а: Станишта строго заштићених и заштићених врста, еколошки коридори и канали значајни за кретање дивљих врста – западни део трасе



Прилог 1.6: Станишта строго заштићених и заштићених врста, еколошки коридори и канали значајни за кретање дивљих врста – источни део трасе



Прилог 2. Техничка решења за заштиту дивљих врста



2а Вертикалне глатке површине, са специјалним горњим рубом као препреке које спречавање доспевање ситних животиња на пут и усмеравају их према пролазима



2б Изградња пролаза за животиње са терасом на косини и облогом са хоризонталним урезима (E75, канал јужно од Хоргоша)

2в Тераса пропуста испод магистралног пута у Старој Пазови. Стрме косине отежавају излазак животиња из воде.



2г Терасе уз бочне ивице проуста за воду формиране од камена и земље испод старе трасе железничке пруге код Старе Пазове.

Број: DD 19/21-19
Датум: 19. 01. 2021.

ПОКРАЈИНСКИ ЗАВОД ЗА ЗАШТИТУ
ПРИРОДЕ

Радничка 20А

21000 Нови Сад

Предмет: **Захтев за Техничке услове за израду Главног пројекта појачаног одржавања државних путева IB 15 и IB 21, LOT1: IB 15, деоница: Сомбор– Кула, L=39.535 km**

Поштовани,

Дана 15.01.2019. године сте нам издали Техничке услове за израду Главног пројекта појачаног одржавања државних путева IB 15 и IB 21, LOT 1: IB15, деоница Сомбор– Кула, L=39.535 km под бројем: 03-3601/2.

Будући да је рок важења Техничких услова две године, молимо Вас да за потребе израде Пројекта издате обновљене услове, тј. да се продужи рок важења издатих услова.

Ми Вам се обраћамо према овлашћењу које је достављено у прилогу дописа, док трошкове издавања услова, према Уговору са ЈП Путеви Србије сноси: Project Biro Utiber d.o.o. Нови Сад.

Уколико су Вам потребне додатне информације или имате било каква питања, молимо Вас да нам се обратите на следећи телефон или e-mail:

Јелена Недељковић, дипл.инж.грађ., тел: (064) 2257442, e-mail: jelenanedeljkovic@yahoo.com

Са поштовањем,

Project Biro Utiber



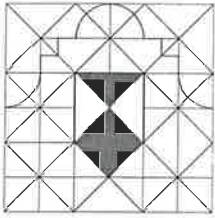
Миодраг Јовић дипл.инж.грађ.
Овлашћени представник консуланта

Достављено:

- Наслову
- Архиви

Прилози:

- Овлашћење ЈП „Путева Србије“
- CD са Прегледном картом



Република Србија
Аутономна покрајина Војводина
**Покрајински завод за
заштиту споменика културе,
Петроварадин**

Штросмајерова 22, 21131 Петроварадин
Т: 021 431211 факс: 021 64 31 198
office@pzzzsk.rs, www.pzzzsk.rs

Republic of Serbia
Autonomous Province of Vojvodina
**The Provincial Institute for the
Protection of Cultural Monuments,
Petrovaradin**

Štrosmajerova 22, 21131 Petrovaradin
Т: +381 21 431211 Fax: +381 21 64 31 198
office@pzzzsk.rs, www.pzzzsk.rs

Број/ Number: 02-253/2-2020

Датум/ Date: 06.12.2020.год.

DO 579/20-710
14.12.2020.



ЈП "Путеви Србије"
Београд
"Projekt Biro Utiber" д.о.о.
Нови Сад

ПРЕДМЕТ: Услови за потребе израде техничке документације Главног пројекта појачаног одржавања путева ИВ 15 и ИВ 21, LOT 1: ИВ 15, деоница Сомбор - Кула

На основу Вашег захтева за издавање техничких услова потребних за израду техничке документације Главног пројекта појачаног одржавања путева ИВ 15 и ИВ 21, LOT 1: ИВ 15, деоница Сомбор - Кула, стручна служба овог Завода је извршила увид у достављену документацију од стране обрађивача предметног Плана и у постојећу документацију и евиденцију Завода и обавила археолошко рекогносцирање терена.

На траси пута ИВ 15, деоница Сомбор – Кула, *регистровано је 17 археолошких налазишта* из праисторијског, античког и средњовековног периода (приказаних на карти у прилогу). Уколико се на простору ових археолошких локалитета буду изводили земљани ископи, машински и грађевински радови они могу довести до уништавања археолошког налазишта. Стога Покрајински завод прописује следеће услове:

- На археолошким локалитетима се не смеју спроводити земљани и грађевински радови без примене прописаних мера заштите археолошког локалитета.

- Неопходне мере заштите археолошких локалитета подразумевају археолошку контролу радова, које спроводи Покрајински завод за заштиту споменика културе.

- Инвеститор је обавезан да благовремено писмено обавести Покрајински завод за заштиту споменика културе о датуму почетка радова, да би се обезбедила археолошка контрола истих.

- У случају да се приликом земљаних радова открију непокретни и покретни археолошки налази, инвеститор је у обавези да заустави радове и предузме мере заштите према посебним условима које ће издати Покрајински завод за заштиту споменика културе и омогући стручној служби да обави археолошка истраживања и документовање на површини са откривеним непокретним и покретним културним добрима.

ПИБ102126979,

жиро рачун: 840-115668-93, 840-115664-08
матични број: 8054860; шифра делатности.: 9103

TIN102126979,

transfer account: 840-115668-93, 840-115664-08
registration No.: 8054860; business activity code: 9103

- Инвеститор је дужан да обезбеди средства за археолошки надзор, истраживање, заштиту, чување, публиковање и излагање добара која уживају претходну заштиту у случају вршења земљаних, грађевинских и осталих радова на површинама где се налазе археолошки локалитети и добра под претходном заштитом.

Образложење:

Покрајински завод за заштиту споменика културе добио је од "Projekt Biro Utiber" д.о.о. из Новог Сада, а у име инвеститора ЈП "Путеви Србије" Захтев за издавање услова потребних за израду техничке документације Главног пројекта појачаног одржавања путева IV 15 и IV 21, LOT 1: IV 15, деоница Сомбор - Кула.

Стручна служба Покрајинског завода је, на основу поднетог Захтева, извршила увид у евиденцију Покрајинског завода о археолошким локалитетима на територији Војводине и обавила археолошко рекогносцирање. На предметном путу до сада је забележено постојање 17 археолошких локалитета, који евентуално могу бити угрожени предвиђеном изградњом. С обзиром да ће се планирани радови на путу Сомбор – Кула одвијати углавном у постојећим габаритима пута и постојећих одводних канала, неопходно је само вршити археолошку контролу ових радова, на местима регистрованих археолошких локалитета.

С поштовањем,

ДОСТАВЉЕНО:

1. Наслову
2. Документацији Завода,
3. Архиви Завода.



Appendix 6 FINAL ENVIRONMENTAL APPROVAL



Република Србија
МИНИСТАРСТВО
ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ

Број: 011-00-00544/2021-03

Датум: 14.05.2021. године

Немањина 22-26

Београд

V
ЈАВНО ПРЕДУЗЕЋЕ "ПУТЕВИ СРБИЈЕ"
Број 953-13797
Датум 11-05-2021
БЕОГРАД, Булевар краља Александра бр. 232

ЈП „Путеви Србије“

Булевар краља Александра 282
11000 Београд

Предмет: Захтев за информацију о потреби израде студије о процени утицаја на животну средину пројекта – појачано одржавање државних путева IB реда бр. 15 и IB реда бр. 21: ЛОТ 1: IB 15 деоница Сомбор (индустријска зона) – Кула, L=39.535 km.

У складу са вашим дописом у којем нам се обраћате са захтевом за информацију о потреби израде студије о процени утицаја на животну средину пројекта — појачано одржавање државних путева IB реда бр. 15 и IB реда бр. 21: ЛОТ 1: IB 15 деоница Сомбор (индустријска зона) – Кула, L=39.535 km обавештавамо вас следеће:

На основу *Закона о процени утицаја на животну средину*, чл. 3. став 1. и став 2. („Службени гласник РС“, број 135/04, 36/09), предмет процене утицаја су пројекти који се планирају и изводе, промене технологије, реконструкције, проширење капацитета, престанак рада и уклањање пројекта **који могу имати значајан утицај на животну средину**, а немају одобрење за изградњу или се користе без употребне дозволе.

Такође, у складу са критеријумима за одлучивање о потреби израде Студије о процени утицаја на животну средину, а на основу Уредбе о утврђивању Листе пројеката за које је обавезна процена утицаја и Листе пројеката за које се може захтевати процена утицаја на животну средину („Службени гласник РС“, број 114/08) којом су утврђени пројекти за које се обавезно израђује процена утицаја-Листа I и пројекти за које се процењује значајан или могућ утицај на животну средину-Листа II, дефинисани су пројекти за које је неопходно отпочети процедуру процене утицаја.

На Листи I наведене уредбе, под тачком 7; подтачка 2, налази се пројекат изградње магистралних аутопутева и путева са четири или више трака, или реконструкција и/или проширење постојећег пута са две траке или мање, са циљем добијања пута са четири или више трака, у случају да такав нови пут или

реконструисана и/или проширена деоница имају непрекидну дужину од преко 10 km или више, укључујући припадајуће објекте, осим пратећих садржаја магистралног пута.

Уколико се у конкретном случају ради о путу који подлеже изради студије према цитираној уредби, ЈП „Путеви Србије“ је као носилац пројекта у обавези да покрене процедуру процене утицаја на животну средину код надлежног органа у складу са Законом о процени о процени утицаја на животну средину („Службени гласник РС“, бр. 135/04, 36/09).

Доставити:

- Архиви
- Наслову



Државни секретар

По решењу о овлашћењу министра број
021-01-13/21-09 од 26.02.2021. године

Александар Дујановић